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**Text and Data Mining Copyright Exceptions  
Regulation in Central and Southeastern Europe**

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## Executive Summary

This is the first research study conducted within the framework of the Knowledge Rights 21 Research Network for Central & Southeastern Europe (KR21 Research Network for C&SE Europe) led by [Dr. Maja Bogataj Jančič](#), [Open Data and Intellectual Property Institute](#). Members of the network that conducted this research are [prof. Dr. Ivana Kunda](#) (Croatia); [Prof. Dr. Iza Razija Mešević](#) (Bosna in Herzegovina); [Prof. Dr. Neda Zdraveva](#) (North Macedonia); and [Prof. Dr. Dušan V. Popović](#) (Serbia), [Associate Prof. Dr. Tihomir Katulić](#) (Croatia) and [Dr. Maja Bogataj Jančič](#) (Slovenia).

This research study examines the implementation of the text and data mining (hereinafter: TDM) exceptions in the copyright laws of selected Central and Southeastern European countries. The study examines copyright laws of Slovenia and Croatia, which are both members of the European Union (hereinafter: EU) that have implemented the EU TDM exceptions, namely articles 3 and 4 from the Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC (hereinafter: DSM Directive).<sup>1</sup> Other countries in the region do not have similar exceptions in their copyright laws.

The absence of similar exceptions in Bosnia and Herzegovina, Serbia, and North Macedonia challenges the more uniform application of text and data mining practices across the region. Extending these exceptions to all regional legislations could enhance open science, improve collaboration, and stimulate innovation, benefiting the entire research community and incentivising private-public partnerships.

A broader legislative harmonisation across the region would foster a more interconnected and collaborative scientific and business community. The countries in the region could especially learn from the good implementation in Slovenia when they add the possibility of digitising analogue material for the purpose of the TDM and sharing results and also add penalties for the copyright holders if the enjoyment of the TDM exceptions is prohibited by technological protection measures (hereinafter: TPMs) and be hindered by the bad implementation that relates to narrow definition of legal access. The implementation in Croatia took into account the lawful access provision from the DSM Directive, allowing content from the open web to be included for TDM purposes.

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<sup>1</sup> Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC.



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**3. Conclusions**



## 1. Introduction

This is the first research study conducted within the framework of the Knowledge Rights 21 Research Network for Central & Southeastern Europe led by [Dr. Maja Bogataj Jančič](#), [Open Data and Intellectual Property Institute](#) (hereinafter: ODIPI). The research focuses on copyright exceptions for text and data mining in the copyright legislation in the selected countries in the region, namely Slovenia, Croatia, Bosnia and Herzegovina, Serbia and North Macedonia.

### 1.1. About KR21

Knowledge Rights 21 (hereinafter: KR21) is dedicated to enacting legislative and practical changes across Europe to enhance everyone's right to knowledge. KR21 is founded on the belief that access to knowledge is crucial for education, innovation, and research, and that all members of society should have the opportunity to access and use information in both analogue and digital formats, which will enable Europe to fulfil its economic, social, environmental, and democratic potential.

KR21 aims to mobilise the potential of Europe's knowledge institutions, particularly libraries, to engage with others across the spectrum of the access to knowledge movement to build momentum towards long-term copyright reform that benefits library users and researchers in the 21<sup>st</sup> century.<sup>2</sup>

### 1.2. About ODIPI – KR21 National and Regional Coordinator

ODIPI is a research, education, and consultancy institution working in the fields of internet and society, open science, open data and data governance in relation to artificial intelligence and copyright law.

ODIPI serves as the National Coordinator for Slovenia and as the Regional Coordinator for the Western Balkans, including Slovenia, Croatia, Serbia, Montenegro, Bosnia and Herzegovina, North Macedonia, and Kosovo. In this role, ODIPI strives to connect copyright experts and advocates throughout the broader region and establish a platform for regional discussion on these issues.

In June 2023, ODIPI organised a TDM webinar. Researchers met for the first time to discuss potential TDM research. The KR21 Research Network for the Western Balkans was established at the meeting, bringing together experts from the region to research and discuss key

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<sup>2</sup> Knowledge Rights 21 - About, URL: <https://www.knowledgerights21.org/about/>.



copyright issues connected to research and science in the region. At the [4th Open Knowledge Days](#) in October 2023, researchers met for the first time in person. At the workshop dedicated to the TDM and open science, they renamed the KR21 Research Network for Central and Southeastern Europe (hereinafter: C&SE Europe).

### 1.3. KR21 Research Network for C&SE Europe

As previously stated, the [KR21 Research Network for C&SE Europe](#) was launched on 23<sup>rd</sup> June 2023. The initial members included [Prof. Dr. Ivana Kunda](#) (Croatia), [Prof. Dr. Iza Razija Mešević](#) (Bosna in Herzegovina), [Prof. Dr. Neda Zdraveva](#) (North Macedonia), and [Prof. Dr. Dušan V. Popović](#) (Serbia), led by [Dr. Maja Bogataj Jančič](#) (Slovenia).

On 17<sup>th</sup> October 2023, experts convened for the first time in person at the [4<sup>th</sup> Open Knowledge Days](#) and a subsequent workshop to discuss TDM. They agreed to prepare a report and, if possible, also an article in a scientific journal. They decided that their second research topic would be open science.

In January 2024, together with Dr Ana Lazarova (KR21 National Coordinator for Bulgaria), Dr Maja Bogataj Jančič organised a webinar on the topic '[New Legislative Developments in support of Open Science – Bulgaria and Slovenia](#)', which also included a discussion on the TDM and promotion of the KR21 Research Network.

[Associate Prof. Dr. Tihomir Katulić](#) (Croatia) was invited to join the KR21 Research Network for C&SE Europe in May 2024.

The KR21 programme is focused on bringing about changes in legislation and practice across Europe that will strengthen the right of all to knowledge. The TDM research undertaken by the network focuses on the copyright exception for text and data mining, which provides the legal foundation for the creation of generative artificial intelligence (hereinafter: AI).



## 2. A Copyright Exception for TDM

### 2.1. TDM Regulation Globally

Legal regulations regarding TDM vary globally. In the United States (hereinafter: US), the principle of fair use applies, meaning that if the use is deemed fair, users do not need to notify or request permission from the copyright holder. Thus, training the generative AI models on copyrighted works falls under fair use.<sup>3</sup> This premise is currently tested in several court cases.

The EU regulates this issue differently. The EU continental copyright law does not recognise the concept of fair use but regulates the balance in copyright with exceptions and limitations to exclusive copyrights. The TDM exception was introduced by Articles 3 and 4 of the DSM Directive in 2019. Even before the introduction of the exceptions by the DSM Directive, several EU countries already had TDM exceptions in place. For example, the United Kingdom had a TDM exception for non-commercial research purposes; Germany allowed TDM under certain conditions, primarily for scientific research; France had specific provisions enabling TDM for public research organisations; and Ireland provided a TDM exception geared towards non-commercial research.<sup>4</sup>

Japan introduced a broad TDM exception in 2009 and amended it in 2018. The exception allows the use of copyrighted data for testing and analysis but does not explicitly differentiate between legally and illegally accessed content. Furthermore, the exception does not apply if the use of data allows 'enjoyment' or benefits from the copyrighted content, aligning with the Berne Convention's 'three-step test'. The importance of lawful data access is underscored, and a warning against using pirated content is given, indicating AI developers could be liable for infringement if they neglect this duty of care.<sup>5, 6</sup>

### 2.2. TDM in the EU Directive

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<sup>3</sup> Klosek, Katherine: Training Generative AI Models on Copyrighted Works Is Fair Use, URL: <https://www.arl.org/blog/training-generative-ai-models-on-copyrighted-works-is-fair-use/>.

<sup>4</sup> Margoni, Thomas; Kretschmer, Martin: A Deeper Look into the EU Text and Data Mining Exceptions: Harmonisation, Data Ownership, and the Future of Technology, URL: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3886695](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3886695).

<sup>5</sup> Stephens, Hugh: Japan's Text and Data Mining (TDM) Copyright Exception for AI Training: A Needed and Welcome Clarification from the Responsible Agency, URL: <https://hughstephensblog.net/2024/03/10/japans-text-and-data-mining-tdm-copyright-exception-for-ai-training-a-needed-and-welcome-clarification-from-the-responsible-agency/>.

<sup>6</sup> Senftleben, Martin: AI Act and Author Remuneration – A Model for Other Regions?



In the context of the European Union, the definition and regulation of TDM are outlined in the DSM Directive. TDM is a process used to analyse large sets of text and data to uncover patterns, trends, and other useful information (Article 2 DSM Directive). The DSM Directive provides a framework to balance the interests of rightsholders with the needs of researchers and innovators. The provisions aim to facilitate innovation and research by allowing broader use of TDM while protecting the rights and interests of content creators and rights holders.

According to Article 2(2) of the DSM Directive, text and data mining is defined as:

‘any automated analytical technique aimed at analysing text and data in digital form in order to generate information which includes but is not limited to patterns, trends and correlations.’

Article 3 of the DSM Directive focuses on TDM for the Purposes of Scientific Research; Article 4 of the DSM Directive is a general exception or limitation for TDM. The most significant difference is that Article 3 allows research organisations and cultural heritage institutions to perform TDM of works or other subject matter to which they have lawful access for scientific research purposes. Such activities are exempt from the need to obtain authorisation from the rights holders, yet measures can be taken to ensure the security and integrity of the networks and databases where the works are hosted. However, these measures should not go beyond what is necessary. In contrast, Article 4 allows anyone who has lawful access to works or other subject matter to perform text and data mining for any purpose, not limited to scientific research. Rights holders can explicitly reserve the right to refuse the use of text and data mining through ‘machine-readable means’ such as metadata, but this reservation must be clear and must be communicated in a way that the lawful user is aware of it.<sup>7</sup>

The DSM Directive mandates EU Member States to transpose these rules into their national laws, ensuring a harmonised approach across the EU while allowing for specific national considerations, which we also researched with our questionnaire.

### **2.3. TDM Regulation in the C&SE Europe**

ODIPI assembled the questionnaire, which was completed by participants and with which ODIPI expects to obtain answers about how well text and data mining exception is integrated into legislation in the region.

Bosnia and Herzegovina, Serbia and North Macedonia do not have a text and data mining exception in their legislation, and they are not part of the EU. Only Slovenia and Croatia have implemented the exceptions as EU members. However, it would be beneficial for open

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<sup>7</sup> Communia: DSM Directive Implementation Guidelines, URL: <https://www.notion.so/communia/DSM-Directive-Implementation-Guidelines-45233be9c0e143338860ae5a03118bf3>.





science; it would enable better cross-border collaboration in digitisation projects in the region and the promotion of innovation if all legislations would have a similar framework. Implementation of the text and data mining exceptions could facilitate research activities, provide access to larger amounts of data, and stimulate technological progress and economic growth throughout the region.

### **2.3.1. Jurisdictions without TDM provisions in the copyright law**

The following presents the current status and expected changes or developments in each individual country.

#### **2.3.1.1. Bosnia and Herzegovina**

The current Law on Copyright and Related Rights (hereinafter: LCRR)<sup>8</sup> Bosnia and Herzegovina (hereinafter: BiH) does not include provisions for text and data mining. The reason is that no amendments have been introduced since the LCRR was passed in 2010,.

Since late 2021, a project funded by the Delegation of EU in BiH aiming to support intellectual property rights is being implemented, which also includes a component dedicated to updating laws in the field of intellectual property in accordance with the current EU standards.

According to the first draft, which is still in the inter-ministerial process, two new articles (Article 54.A and 54.B) were being introduced, which regulate three new mandatory substantial limitations of copyright from the DSM Directive.

Article 54.A transposes the first paragraph of Article 4 of the DSM Directive, which establishes a new mandatory substantial limitation for the reproduction of lawfully accessible works (no remuneration) for the purpose of TDM for any purpose. According to the wording of Article 54.A, the exception also covers the open web and computer programs, not only organisational collections and in case the conditions from the new article are met, the lawful user can not only reproduce but also translate, adjust, or adapt the computer program and reproduce the results of those adaptations for the purpose of text and data mining.

The article applies to non-commercial and to commercial mining. The article is silent on sharing the results of TDM.

Article 54.B transposes Article 3 of the DSM Directive, which prescribes a mandatory substantial limitation for TDM for the purpose of scientific research. The beneficiaries of the exception for scientific purposes are research organisations (meaning a university, including

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<sup>8</sup> Official Gazette of BiH, No. 63/10.



its libraries, research institutes, or any other entity whose main goal is to conduct scientific research or conduct educational activities that include the conduct of scientific research), publicly accessible archives, libraries, museums, film or audio heritage institutions and public broadcasting organisations. In this case, only non-commercial mining can be performed under the exception, and this new article explicitly states that the results (copies) should be kept in a secure environment that prevents unauthorised persons from accessing them. Also, Article 54.B states that the exception is protected against contractual override regarding scientific research.

The amended LCRR is still in the draft stage and not yet open to public consultations. Hence, there could still be changes to the legislative text. The provisions regarding TDM are not very likely to appear at the forefront of public consultations and discussions during the formal legislative procedure. As of June 2024, the draft did not enter the formal legislative procedure.

#### **2.3.1.2. Serbia**

The Law on Copyright and Related Rights<sup>9</sup> in Serbia does not provide exceptions for TDM. The only explicit mention of scientific research is in Article 55, which prescribes a statutory licence.

The Draft of the Serbian Copyright Act from January 2023 does not envisage the introduction of the TDM exception into the Serbian copyright system. According to the available information, the draft is not intended to harmonise Serbian law with the DSM Directive but with earlier EU law (e.g., the Orphan Works Directive).<sup>10</sup>

#### **2.3.1.3. North Macedonia**

The existing legislation of the Republic of North Macedonia Law on Copyright and Related Rights (hereinafter: LCR)<sup>11</sup> does not regulate the issue of the TDM, although it provides exceptions related to research. As per Article 52, the use of copyrighted work without payment of compensation is permitted, inter alia, in the following cases:

- for the use of works for the purpose of illustration in educational or scientific research to the extent justified by the non-commercial goal to be achieved, provided that the name of the author and the source are indicated, except if this is not possible (Art. 52, para. 1, point 4);
- for the use of parts of works (citations) in scientific research, for teaching, criticism, controversy or review, to the extent and to the extent necessary for the specific

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<sup>9</sup> Official Gazette of RS 104/2009, 99/2011 from 27.12.2011 and 119/2012.

<sup>10</sup> Directive 2012/28/EU of the European Parliament and of the Council of 25 October 2012 on certain permitted uses of orphan works.

<sup>11</sup> Official Gazette of the RM" No. 47/96, 3/98, 98/02 and 4/05.



purpose and on the condition that the name of the author and the source are indicated unless this is not possible (Art. 52, para. 1, point 7);

- for public announcement and making available to the public of an author's work for the purpose of research or personal improvement in certain places in public scientific, cultural, educational and other institutions of a similar nature if the work cannot be purchased, or its use does not require permission and is part of the collections/fund of the institutions (Art. 52, para. 1, point 17).

The Ministry of Culture, responsible for the issues of copyright and related rights, established a working group tasked to develop draft provisions for the amendment of the LCR aimed at transposing the DSM Directive in July 2022. However, as of June 2024, the ministry has not officially started a legislative procedure for amendments to the LCR; therefore, the current status of the draft is not clear, as legislative deliberations were not open to the public.

### **2.3.2. Jurisdictions with the TDM provisions in the copyright law**

The following presents the regulation by categories, as outlined in the questionnaire, for each country.

#### **2.3.2.1. Croatia**

The new Croatian Copyright and Neighbouring Rights Act (hereinafter: CCNR)<sup>12</sup> from 2022 contains provisions specifically regarding TDM for scientific research purposes (Article 187) and for other purposes (Article 188). TDM is defined in Article 187(4) as any automated analytical technique whose goal is to analyse text and data in digital form to create data, which includes patterns, trends, and correlations.

##### **2.3.2.1.1. Beneficiaries of Exception**

Article 187 of the CCNR refers to scientific organisations and cultural heritage institutions as beneficiaries of these exceptions.

##### **2.3.2.1.2. Definition of Lawful Access**

Lawful access, or as stated in the CCNR as legal access in Article 187(5), means access to content protected by copyright or related rights, which is based, among other things, on a contractual relationship between the right holder and scientific organisations and cultural heritage institutions, which can be a subscription relationship, a relationship based on an

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<sup>12</sup> Official Gazette No. 111/2021.



open access policy or on other legal ways of gaining access to content protected by copyright or related rights. It is considered that all persons covered by subscriptions and usage agreements have legal access due to their connection with scientific organisations and institutions of cultural heritage.

#### **2.3.2.1.3. Scope of Coverage (Organisational Collections vs. Open Web)**

Article 187(1): 'Duplication of works of authorship, including author's databases, and objects of related rights, including actions of extracting part of the content and actions of reusing all or a significant part of the content of a non-original database performed by scientists, is permitted without the approval of the right holder and without payment of compensation.' Cultural heritage organisations and institutions for the purpose of text and data mining for the purposes of scientific research in works of authorship and related rights to which they have legal access', and Article 187(4): 'Text and data mining means any automated analytical technique whose goal is to analyse text and data in digital form to create data, which includes patterns, trends, and correlations' imply an exception relates to organisational collections.

#### **2.3.2.1.4. Subject of Data Mining**

Provision of Article 187(1) allows for the mining of any type of work subject to copyright (including a computer program); subject matter covered by neighbouring rights such as sound recordings, performances, broadcasts, online uses of press publications; and any type of database subject to *sui generis* database rights.

#### **2.3.2.1.5. Copyrighted Restricted Acts**

Copyrighted restricted acts that are covered by TDM exception are reproduction (i.e., copying) and extraction and/or re-utilization of the whole or of a substantial part of the contents of a database.

#### **2.3.2.1.6. Purpose of Exception**

Article 188 of the CCNR correlates with Article 4 of the DSM directive for any purposes, and Article 187(1) of the CCNR with Article 3 of the directive for scientific research purposes.

#### **2.3.2.1.7. Commercial and/or non-commercial mining**

Both commercial and non-commercial mining can be performed under the exception of the CCNR.



#### **2.3.2.1.8. Remuneration**

The exception in the CCNR is not a subject to remuneration.

#### **2.3.2.1.9. Sharing of Results**

The law is silent about the conditions of sharing results.

#### **2.3.2.1.10. Storage Limits for Reproductions, Normalised Data and Derived Data**

Article 187 of the CCNR does not have specified storage limits for reproductions, normalised data and derived data. However, Article 188 defines the storage limit as ‘only for as long as is necessary to achieve the purpose of text and data mining.’

#### **2.3.2.1.11. Protection Against Contractual or Technological Override**

Article 187(9) states that ‘contractual provisions contrary to the provisions of this Article are null and void’, meaning the contractual override is not allowed.

### **2.3.2.2. Slovenia**

Provisions about TDM were introduced with the amendment of the Slovenian Copyright and Related Rights Act (hereinafter CRRRA)<sup>13</sup> in 2022. Article 57.a specifies an exception from Article 4 of the DSM Directive, and Article 57.b specifies an exception from Article 3 of the directive. Both TDM exceptions include a legal basis for the digitalisation of analogue works for the purpose of the TDM. Both exceptions allow remote access to the content for the purposes of text and data mining.

#### **2.3.2.2.1. Beneficiaries of Exception**

Article 57.b of the CRRRA determines beneficiaries of the exceptions as research organisations, universities, educational establishments, schools, publicly accessible archives, libraries, museums, film or audio heritage institutions and public broadcasting organisations, and specifically the persons belonging to research organisations and cultural heritage institutions. Article 57.a of the CRRRA determines beneficiaries as users in general.

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<sup>13</sup> Official Gazette of the Republic of Slovenia, No. 21/95 of April 14, 1995, as amended up to October 26, 2022.



#### **2.3.2.2.2. Definition of Lawful Access**

Implementation of the lawful access definition is narrower and does not comply with the Recital 14 of the DSM Directive,<sup>14</sup> which specifies that lawful access should be understood to cover access to content based on an open access policy or through contractual arrangements between rightsholders and research organisations or cultural heritage institutions.

Slovenian transposition defines lawful access in line with the general definition of this concept in Slovenian copyright legislation. This is in line with the general definition of ‘lawful access’ that is generally applied<sup>15</sup> in the CRAA, although it is not explicitly defined in the CRRA. This approach will hopefully be challenged in court and adjusted in the future.<sup>16</sup>

This narrower implementation is problematic and will inhibit projects that aim to mine content on the open web. As specified in Recital 14 of the DSM Directive, lawful access should also cover access to content that is freely available online. This will be highly problematic in cases where content is available online but not made available to the public under free or open licences or on the basis of contracts.

#### **2.3.2.2.3. Scope of Coverage (Organisational Collections vs. Open Web)**

The definition in the Slovenian CRRA does not include content that is freely available online and, therefore, is narrower than the definition provided in the DSM Directive, nor does it specifically mention organisational collections, although the beneficiaries are allowed to perform TDM on works and other subject matter to which they have lawful access, typically encompassing organisational collections like academic journals, databases, and institutional archives.

#### **2.3.2.2.4. Subject of Data Mining**

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<sup>14</sup> Recital 14: “Research organisations and cultural heritage institutions, including the persons attached thereto, should be covered by the text and data mining exception with regard to content to which they have lawful access. Lawful access should be understood as covering access to content based on an open access policy or through contractual arrangements between rightsholders and research organisations or cultural heritage institutions, such as subscriptions, or through other lawful means. For instance, in the case of subscriptions taken by research organisations or cultural heritage institutions, the persons attached thereto and covered by those subscriptions should be deemed to have lawful access. Lawful access should also cover access to content that is freely available online.”

<sup>15</sup> According to the Slovenian legislation, all uses are prohibited, unless the work can be used on the basis of contracts, licences or an explicit provision in the law.

<sup>16</sup> Bogataj Jančič, Maja: Exceptions with teeth: the new Slovenian text and data mining provisions, URL: <https://www.knowledgerights21.org/blog/exceptions-with-teeth-the-new-slovenian-text-and-data-mining-provisions/>.



Mining for scientific purposes is permitted on any type of work subject to copyright, including literary works, musical works, artistic works, computer programs, and other types of creative content, provided that lawful access is maintained. The TDM exception in CRRA also allows for the mining of subject matter covered by neighbouring rights, such as sound recordings, performances, broadcasts, and online uses of press publications, and any type of database subject to sui generis database rights, as long as the database is accessed lawfully. For that, Article 57.a of the CRRA permits such activities only on works and databases (*sui generis*).

#### **2.3.2.2.5. Copyrighted Restricted Acts**

A permissible copyrighted restricted act in the Slovenian CRRA is reproduction; therefore, copying of works or parts of works is permitted if it is done to enable the analysis of text and data, including temporary copies necessary for TDM processes. Regarding databases, the extraction and re-utilisation of the whole or substantial part of a database's contents are also allowed, provided it is for TDM purposes, and the content is lawfully accessed.

In addition, digitising analogue material and remote access to content is permitted when necessary for text and data mining purposes.

#### **2.3.2.2.6. Purpose of the Exception**

Article 57.a of the CRRA implements an exception from Article 4 of the DSM Directive (purpose is not specified, i.e., for any/general purpose), and Article 57.b specifies an exception from Article 3 of the directive (scientific research and digitisation).

#### **2.3.2.2.7. Commercial and/or non-commercial mining**

Under the Slovenian TDM, exceptions for both commercial and non-commercial mining can be performed.

#### **2.3.2.2.8. Remuneration**

The exception in the CRRA is not a subject to remuneration. The TDM exception in Article 57.b of the CRRA for non-commercial scientific research purposes does not require remuneration. This means that research organisations, cultural heritage institutions, and similar entities can perform TDM on works they have lawful access to without needing to pay additional fees to rightsholders. The general TDM exception, which allows TDM by any individual or entity with lawful access to works, is also not subject to remuneration. This covers both non-commercial and potential commercial uses.



#### **2.3.2.2.9. Sharing of Results**

Article 57.b(5) states that: ‘The sharing and making available to the public of the results of the text and data mining referred to in paragraph one of this Article shall be permissible provided that the extent of the text and data mining is limited by the intended purpose, is compatible with fair practice, does not conflict with normal use of the work and does not unreasonably prejudice the legitimate interests of the author.’ Such sharing is aligned with the objectives of promoting innovation, knowledge dissemination, and scientific progress. However, commercial use and sharing of results may require additional considerations and permissions.

TDM activities, especially when conducted by non-commercial entities for scientific research, do not fall squarely within the scope of communication to the public as defined by copyright law; therefore, the Slovenian CRRA does not mention it.

#### **2.3.2.2.10. Storage Limits for Reproductions, Normalised Data and Derived Data**

Article 57.a of the CRRA defines that ‘Copies of works made under the conditions referred to in the preceding paragraph may be retained for as long as necessary for the purposes of text and data mining.’ Likewise, Article 57.b states that ‘Copies of works made under the conditions referred to in paragraph one of this Article shall be kept in a secure environment and may be retained for as long as is necessary for the purposes of verifying the results of the research for which the text and data mining was carried out. In order not to unduly restrict use pursuant to paragraph one of this Article, storage in a secure environment should be provided with an appropriate level of security, which should be proportionate and limited to what is necessary for the secure storage of copies and the prevention of unauthorised use.’

#### **2.3.2.2.11. Protection Against Contractual or Technological Override**

Article 57.a and Article 57.b of the CRRA stipulate that any contractual stipulation contrary to these exceptions shall be null and void. While this is a correct implementation in connection to the TDM for research purposes, it is unusual that the contractual override is provided in connection to the general TDM exception in connection to which, according to Article 4 of the DSM Directive, an opt-out is provided. According to the Slovenian implementation, any opt-out clause in the contracts is null and void.

#### **2.3.2.2.12. Suggestions for improvements in Slovenian regulation**

Slovenia implemented the TDM exceptions in 2022; in general, the exceptions are deemed progressive. allowing digitisation of analogue material and sharing of the TDM results. It is described as an ‘exemption with teeth’ (rights holders need to ensure that the beneficiaries





of the exceptions can effectively perform TDM and need to act within 72 hours or otherwise face sanctions).

The weakness of the Slovenian regulation is the definition of lawful access from the DSM Directive, which was not implemented correctly. Consequently, the TDM on the content freely available on the web is not included. In addition, it has not yet been clarified in practice how mediation will be carried out and how it will be required from the right-holders to enable enjoyment of the exception to its beneficiaries in the 72-hour frame.<sup>17</sup>

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<sup>17</sup> Bogataj Jančič, Maja: Exceptions with teeth: the new Slovenian text and data mining provisions.



### 3. Conclusions

Analysis of the TDM exceptions in the region, especially of the Slovenian and Croatian implementation of the exceptions, reveals a lack of harmonisation in the region.

Slovenia and Croatia have implemented TDM exceptions as required by the DSM Directive. Both countries implemented two exceptions: an exception for the TDM in scientific research and an exception for general TDM. There are many differences among Slovenian and Croatian implementations.

Slovenian scientific research TDM activities are supported by the progressive TDM exception. However, the very narrow definition of lawful access will severely hinder scientific research. In the process of the implementation, the Slovenian Copyright Office and the Ministry of the Economy, Tourism and Sport ignored warnings from the scientific community and insisted that a general definition of lawful access would also apply to the TDM activities and the content available on open web will remain excluded unless it is made available with open licences or contracts. This flaw will severely hinder scientific research and public partnership projects in Slovenia and must be corrected in the future.

The absence of TDM exceptions in other regional jurisdictions poses a challenge to cross-border cooperation. Extending these exceptions to all regional legislations would enhance open science, improve digital collaboration, and stimulate innovation, benefiting the entire research community and beyond.

Considering these findings, while significant progress has been made in integrating TDM exceptions within Slovenian and Croatian laws, there remains a pressing need for broader legislative harmonisation across the region.