

Summary Report

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2019 – Study Question – Copyright/Data Copyright in artificially generated works

Introduction

Of all the technological advances that attract lawyers' attention, artificial intelligence (AI) stands as a good a chance as any of proving to be genuinely transformational. As more AI systems are deployed that can assist or replace humans in the performance of everyday tasks and creative endeavors, they will inevitably encounter the same kinds of IP questions as humans do.

Many questions arise for IP lawyers, such as: can something made by or using an AI system be a copyrighted work and, if so, where do the rights lie? Can an AI system invoke any exceptions or limitations and, if so, whose use and expression rights should the law balance against the exclusive rights of the author? How is any term of copyright protection measured if the author is a machine?

There is already a lively debate about whether the advent of AI challenges the fundamental assumptions, structures and concepts of copyright law, or whether current laws will suffice as long as its practitioners understand how the technology works. In part, these mirror familiar philosophical debates about the justifications for copyright protection.

If the rationale is to promote the progress of science and useful arts, it may be possible to make room for non-human authors, users and infringers. However, if copyright is conceived as a fundamental, moral right afforded to human creators, it is harder to accept protection for works created by algorithms, even as they learn to create stories, music and images that are indistinguishable from human works. There are also more practical questions around the relevance and application of classic copyright concepts such as reproduction, distribution, display and communication.

At the current time, most jurisdictions appear to consider human intellectual authorship a prerequisite for copyright protection. However, that leaves open the question of whether a human who programs, trains or operates an AI application might qualify for authorship.

As AI systems become more pervasive, more able and more consequential, national copyright

approaches may diverge further. Disputes are also likely around less philosophical aspects of copyright protection, from the delineation of the reproduction right to the need for new exceptions in areas such as text and data mining. From an economic point of view, investments in the field of AI are considerable, especially in the creation of works. One of the purposes of intellectual property is to encourage the creation of works. It is therefore important that the legal regime applicable to AI created works encourages these investments. Thus, this is an opportune moment for AIPPI to study the intersection of AI and copyright.

This Study Question thus seeks to establish if and under what conditions Copyright and/or Related Rights should be available for artificially-generated works.

This Study Question does not address the following related issues:

- copyright infringement by artificially-generated works;
- copyright in computer programs or algorithms used for artificial intelligence systems;
- copyright in intermediate works, i.e. works created during each step of the process.

Only the final work is within the scope of this Study Question.

The following definitions have been used in connection with this Study Question:

- In the context of this study, the term “Copyright” means the rights associated with copyright as set forth in the Berne Convention.
- The term “Related Rights” means all other copyright-type rights, e.g. “related rights”, “neighbouring rights”, “sui generis rights”, etc.
- The term “Economic Rights” means the exclusive rights of Copyright granted to the author, e.g. the right of reproduction.
- The term “Moral Rights” means the rights of Copyright granted to the author apart from Economic Rights, e.g. the right to object to distortion of the work.

In addition, to provide a concrete basis for analysis of this Study Question, the following Working Example is adopted:

Step 1: One or more AI entities are created that are able to receive inputs from the environment, interpret and learn from such inputs, and exhibit related and flexible behaviours and actions that help the entity achieve a particular goal or objective over a period of time. The particular goal or objective to be achieved is selected by a human and, for purposes of this Study Question, involves generation of works of a type that would normally be afforded copyright protection.

Step 2: Data is selected to be input to the one or more AI entities. The data may be prior works such as artwork, music or literature as in the examples above. The data also may be inputs from sensors or video cameras or input from other sources, such as the internet, based on certain selection criteria.

[Case 2a]. The data or data selection criteria are selected by a human.

[Case 2b]. The data or data selection criteria are not selected by a human.

Step 3: The selected data is input to the one or more AI entities, which achieve the particular goal or objective over time by generating “new works” that are not identical to any prior work.

[Case 3a]. A human makes a qualitative or aesthetic selection of one work from the new works.

[Case 3b]. No human intervention is involved in selection of a work from the new works.

The Reporter General has received Reports from the following Groups and Independent Members in alphabetical order: Australia, Austria, Belgium, Brazil, Bulgaria, Canada, Chile, China, Czech Republic, Denmark, Ecuador, Estonia, France, Finland, Germany, Hungary, Italy, Japan, Latvia, Mexico, Netherlands, Paraguay, Singapore, Spain, Sweden, Independent members-Taiwan, Turkey, United Kingdom, United States of America, Switzerland.

30 Reports were received in total.¹ The Reporter General thanks the Groups and Independent Members for their helpful and informative Reports. All Reports may be accessed [here](#).

The Reports provide a comprehensive overview of national and regional laws and policies relating to copyright in artificially generated works, set out in three parts:

- Part I – Current law and practice
- Part II – Policy considerations and proposals for improvements of the current state of the law
- Part III – Proposals for harmonisation.

This Summary Report does not summarise Part I of the Reports received. Part I of any Report is the definitive source for an accurate description of the current state of the law in the jurisdiction in question.

This Summary Report has been prepared on the basis of a detailed review of all Reports (including Part I), but focuses on Parts II and III, given AIPPI's objective of proposing improvements to, and promoting the harmonisation of, existing laws. As it is a summary, if any question arises as to the exact position of a particular Group in relation to Parts II or III, please refer to the relevant Report directly.

In this Summary Report:

- references to Reports of or responses by one or more "Groups" may include references to Independent Members;
- where percentages of responses are given, they are to the nearest 5%; and
- in Part IV below, some conclusions have been drawn in order to provide guidance to

¹ Reports received after 1 July 2019 are listed above but their content is not included in the summary in Parts II and III.

the Study Committee for this Question.

I. Current law and practice

For the replies to Questions 1) - 11) set out in the Study Guidelines for this Study Question, reference is made to the full Reports. The Study Guidelines may be accessed [here](#).

II. Policy considerations and proposals for improvements of your Group's current law

12) Could any of the following aspects of your Group's current law or practice relating to artificially-generated works be improved? If YES, please explain.

a. Requirements for artificially-generated works to be protected by Copyright and/or Related Rights?

- 17 Groups (55%) indicate that their current legislation could be IMPROVED, in order to have greater certainty and clarity regarding the legal conditions of protection for artificially generated works.

These clarifications concern for instance:

- Determine if existing related rights are opened to AI works (DE);
- Conditions of protection, ownership of AI works by Copyright (ES);
- Application of the "works-for-hire" doctrine (The U.S. Group considers that the Copyright Act could be amended to accommodate such authorship scenarios. One way to do so would be to treat all artificially-generated works similarly to works-for-hire created by human authors. Copyright in the artificially-created work could be considered as belonging to a human or corporate entity).

- 9 Groups (30%) consider that current law should NOT be modified.

The Swiss Group indicates: *"Irrespective of the sophistication of AI entities, such entities remain tools (like paint brushes), which may be used to produce copyrightable material when creatively leveraged by human person. Thus, assuming that the current law or practice can adequately cope with works obtained via previous computerized techniques, the present group does not see a need for improvement for what specifically concerns artificially-generated works"*.

The Finish Group indicates that some soft law recommendations would be welcome.

- 4 Groups (15%) indicate that NO CONSENSUS could be reached by the Group to determine whether or not AI works should be protected by IP rights.

For instance, the Japanese Group indicates that: *"Three different opinions about protection of AI-generated works as shown below, and we could not reach a consensus:*

A: Protection by copyright should be available.

B: Protection by related rights or a different system than the Copyright Act should be available.

C: The current law/practice is good enough, and no need for further protection by copyright or related rights.

To adopt Opinion A (protection by copyright), it will be necessary to change the definitions of a work and its author in the Japanese Copyright Act in such a way that a work can be created not only by a human.

In the case of Opinion B (protection by related rights etc.), it will be necessary to introduce a new system for protection of AI-generated works, either as part of the related rights or in another framework of legal protection.

According to Opinion C (preservation of the status quo), there is no need for any improvement, in particular”.

- 2 Groups (5%) propose to create in their legislation a NEW SUI GENERIS RIGHT for artificially generated works.

The UK Group indicates that: *“It is therefore proposed that a new sui generis Related Right be introduced to replace the protection afforded to computer-generated works by div 9(3) CDPA. This would recognise and incentivise the substantial investment made by individuals and companies in developing AI technology for multiple purposes. By removing such a right from the framework of copyright it both avoids the need to strain existing concepts of originality and provides a sound basis for protecting AI generated works in the future when it would be impossible to apply such concepts of originality to such works. It also provides a sounder basis for international harmonization”.*

b. Ownership of artificially-generated works?

- 5 Groups (15%) indicate that their current legislation could be improved in order to have greater certainty and clarity regarding the ownership of artificially generated works
- The Swedish Group considers that “The human or legal entity that made a significant investment in the creation should get the ownership of the sui generis right”.
- The US Group proposes that: *“If a person authors or owns an AI system, and if the work is created by the AI system under consistent control of the owner (and any employees or contractors, consistent with the work-for-hire doctrine), the output work may be considered the property of the owner, and copyright is with the owner.*

In another scenario, a person may own the AI system, but the work may be generated by a person who is not an employee or a work-for-hire contractor user of the system (for example, one who rents or borrows the AI system). In this case, the means of creating the artificially-created work would be owned by one person (the owner), but creative control of the AI system would be in the hands of another person (whom we shall refer to as “the user”). In this case, the AI system may be considered purely as a tool in the hands of the user, who provides inputs, goals, training data and/or other guidance to the AI system, which results in the AI system producing the artificially-created work. In this case, it would seem fairer for copyright to be associated with the user, and for the user to be the author of the output, rather than the owner of the AI system; again, the AI system, itself, would be considered as a worker or tool under

control of the user. The AI owner may be considered merely as one who provides a tool to the user.

What all of these scenarios have in common is that copyright resides with the person who takes an active role and provides human creativity in creating the artificially-created work”.

c. Term of protection of artificially-generated works?

- Several Groups consider that the term of protection of artificially generated works should be SHORTER than for others works; e.g.:
 - 15 years (SE);
 - 20 years (EC);
 - 25 years after the creation (UK).

The German **Group indicates that:** *“The term of protection for each Related Right is an expression of the effort to balance the interest in a market free from monopolies and the necessity to incentivize authors to continue to make such works. This rationale must be the basis for any discussion on terms of protection when it comes to AI works.*

Second, it has to be avoided that by granting excessively extended rights to AI works, such works will gain an economic advantage over the same type of works when produced in the traditional way. If an artificially generated film is much cheaper than the production of a traditional film (because AI software generates artificial characters which do not have to be paid like actors), then granting the same term of protection to an AI film as to a regular film will rather sooner than later result in traditional films – together with the guilds of actors – not being produced any longer as they carry a substantially higher economic risk without any additional reward”.

- 5 Groups (15%) consider that the term should be IDENTICAL.

13) Are there any other policy considerations and/or proposals for improvement to your Group's current law falling within the scope of this Study Question?

No other policy considerations and/or proposals for improvement to current law have been mentioned.

III. Proposals for harmonization

14) In your opinion, should Copyright protection and/or Related Rights protection for artificially-generated works be harmonized? For what reasons?

- 25 Groups (80%) consider that harmonization is needed, for different reasons:
 - To foster investment in R&D (to give investors clear scope of the protection irrespective of the jurisdiction);
 - AI works are exploited worldwide.
- 5 Groups (15%) consider that NO harmonization is needed, for different reasons:
 - It is too early to harmonize these specific works;
 - There is no consensus with the members of the Group

15) In your opinion, should artificially-generated works be protected by Copyright and/or Related Rights? For what reasons?

- The vast majority of the Groups consider that artificially-generated works should be protected by Copyright and/or Related Rights if they meet the existing conditions for protection, e.g. they are human creations, and not purely automatically generated by the AI entity.

A minority of Groups consider that artificially-generated works should be protected by Copyright and/or Related Right, even if such works are created without human intervention.

The position of the Groups can be summarized by Dutch Group opinion: *“The majority view of the Dutch Group is that artificially-generated works should not be awarded protection in order to provide an incentive for the creation of such works. Full Copyright protection should be reserved for works that meet the criteria for Copyright protection. Only in so far as an artificially-generated work will meet these criteria it can be protected by Copyright Law. The same goes for Related Rights protection. The minority view is that protection should be awarded protection to provide an incentive for the creation of such works ».*

- Groups that are opposed for the protection of works created without human intervention consider that such protection would hurt Copyright concepts and that risks could arise for protection of human creations.

For instance, the French Group indicates that, regarding Copyright: *“it would be inappropriate to protect artificially-generated works created without human intervention. Naturally, this does not rule out protection for the choices of the user of the artificial intelligence, provided such choices are present in the work created. Author's rights protection then depends only on the originality expressed by the user. The assessment that author's rights are not appropriate applies only to the protection of "choices" made by the machine.*

Admitting that such non-human "choices" could benefit from author's rights would contradict the essence of the notion of author's rights, in both its French and European conceptions, which implies the intervention of a sentient human who expresses his personality through a series of deliberate choices.

In contrast, artificially-generated creations are the random result of a set of algorithms. They could someday be the result of "deliberate choices" but this does not seem to be the case for the moment. In any event, artificial intelligence cannot express a personality. For this first reason, the French Group is not in favor of author's rights protection for such "creations (...). Lastly, there is a risk that, if it is admitted that a machine is capable of creation within the meaning of author's rights law, there will be a massification of algorithmic creations and, as a result, a saturation of the range of possible creations. As the creative capacity of artificial intelligence is vastly greater than human activity, this could lead to an increasing risk of infringing an already existing computer-generated creation, knowing that the condition of originality would already be affected by the massification of creations due to the intervention of artificial intelligence. Therefore, such a situation would cause difficulties as to the existence and coexistence of rights”.

Regarding Related Rights, the French Group states that: *“Under certain conditions, works created thanks to/by artificial intelligence should be able to benefit from protection under related rights, including sui generis rights, and they can already be in some instances.*

However, the French Group is reserved as to the creation of a new related right or, more specifically, *sui generis* right, outside the existing categories, to protect works created automatically by artificial intelligence, and which would benefit only investors. The French Group admits that the promotion of intellectual property would justify granting *sui generis* rights to foster investments in this new technological sector. The exclusivity granted would encourage industry members to make such investments. However, there are two potential obstacles to this logic. On the one hand, the French Group is worried about the possibility of excessive protection, which could ultimately accentuate the crisis in public opinion with regard to intellectual property. On the other hand, the French Group is also concerned with a possible curtailing of the creative freedom enjoyed by authors who are natural persons. Indeed, the risk with such *sui generis* protection is that an author could become an infringer of a machine generated creation.

Because of these hesitations, the French Group recognizes that it is still too soon to discuss the relevance of *sui generis* Protection.”

- Groups that are in favor of the protection of works created without human intervention consider that such protection is justified by investments and to incentive creation.

The German group is of the following opinion: “Artificially-generated works should be protected by Copyright in case there is sufficient creative human input into the generation of the work.

Artificially-generated works should not be protected by Copyright in case there is no human input, but such works are mere AI creations.

However, in such scenarios, Related Right protection should be available. But this should only be the case if the reason for Related Right protection applies to AI created works also. For example, in case a Related Right protection stems from protecting the investment, such Related Right protection should also be available to mere AI works. Such a Related Right could be owned by the AI investor, which may also be a judicial entity.”

The UK Group supports protection of artificially-generated works because “AI-tools are already at a level where the content that they output can be indistinguishable from human-generated works from the point of view of the consumer of that content. As a result, appropriate protection from copying should be provided for all relevant works, whether they be artificially-generated or human-generated. To deny protection for artificially-generated works would be providing free reign to potential copiers of such works, with no reasonable justification.”

16) Should intervention by a human be a condition for Copyright protection of an artificially-generated work? If yes, at which step or steps in the Working Example would human intervention be required?

- 24 Groups (85%) consider that intervention by a human SHOULD BE A CONDITION for Copyright protection of an artificially-generated works.

More precisely, these reports consider that the human intervention should be required at following steps:

Step 1: Creation of the AI entity to achieve a particular goal (8 reports).

Step 2: Data selected to be input (11 reports).

Step 3: creation of new works (8 reports):

Some Groups point out that the recognition of protection should be made on a case by case basis.

- 4 Groups (15%) consider that intervention by a human should NOT be a condition for Copyright protection of an artificially-generated works.

17) Should originality be a condition for Copyright protection of an artificially-generated work?

- 26 Groups (85%) consider that originality SHOULD BE A CONDITION for copyright protection of an artificially-generated works, e.g., because software can produce an enormous volume of works (Bulgarian Group), to avoid the need to modify the fundamental requirements for the Copyright protection.

The Spanish Group indicates that: *“Originality should be necessary (as it is necessary for the protection of any other traditional work, generated by a person). It should be an objective originality (other than a copy of a pre-existing work). If originality is linked to human creation, a work generated by an artificial intelligence system could only be original if there was human intervention of some kind in the process.”*

- One Group considers that originality should NOT be a condition for copyright protection of an artificially-generated works.

18) What other requirements, if any, should be conditions for Copyright protection of an artificially-generated work?

- The majority of Groups consider that NO OTHER SPECIFIC REQUIREMENT should be a condition for copyright protection of an artificially-generated work, except the general requirements for copyright protection (fixation of the work, not an idea, etc.).
- Some Groups propose specific other requirements:
 - Reproducibility: CN
 - Independent (not a copy, nor a modification of an existing work): FI
 - An originality declaration to avoid mass production protection: EC
 - Own intellectual efforts and free consciousness: BG
 - Registration before the IP office: BR
 - Being within the literary, academic, artistic or musical domain: JP
 - Steering and controlling influence of the human author on the resulting work: DE

Furthermore, the German Group points out that: *“There is also a factual problem that in most cases third parties cannot distinguish whether the work originates from a human being or not. To the extent that Copyright protection of AI works falls behind the protection of traditional works, there will be an incentive for makers of AI works to conceal the artificially generated part of the work. Therefore, an obligation to disclose the use of AI might be considered, e.g. as a condition for protection as a Related Right. But the possibility to verify and to enforce this obligation must be questioned”.*

19) Who should be the original owner of the Copyright on an artificially-generated work?

- 14 Groups (45%) consider the original owner of the copyright on an artificially-generated work should be determined according to the general rules governing copyright.

Additionally, 3 Groups consider that the original owner should be the natural person directly responsible for the IP creation.

- 3 Groups (10%) consider the original owner of the copyright on an artificially-generated work should be the owner of the AI entity:
- 2 Groups (5%) consider the original owner of the copyright on an artificially-generated work should be the user of the AI.
- 1 Group considers the original owner of the copyright on an artificially-generated work should be the human author or entity who selects the data.

20) What should be the term of Copyright protection for an artificially-generated work?

- The majority of Groups consider that the term of copyright should be the NORMAL term (17 – 55%).
- 5 Groups (15%) consider that the term should begin from the creation or publication.
- 5 Groups (15%) consider that the term should be SHORTER than for general works, because of the reduction of costs of the AI generated works and in order to safeguard the traditional authors.

21) Should Economic Rights differ between artificially-generated works and regular works?

- 21 Groups (70%) consider that Economic Rights should NOT differ between artificially-generated works and regular works.
- 6 Groups (20%) consider that Economic Rights should differ between artificially-generated works and regular works.

Protection should be lower than for other works according to the Chinese Group.

22) Considering existing exceptions to Copyright, should any exceptions apply differently to artificially-generated works versus other works?

- 19 Groups (60%) consider that exceptions should NOT APPLY DIFFERENTLY to artificially-generated works versus other works.

For instance, the UK Group considers that: *“the exceptions to copyright do not discriminate between origins of works. The coherence of the law of copyright would be undermined if artificially-generated work was treated differently to other works.”* The Italian group indicates that the copyright law should remain neutral from a technological point of view.

- 6 Groups (20%) consider that any exceptions SHOULD APPLY DIFFERENTLY to artificially-generated works versus other works.

The Chinese Group considers that: *“Based on the immortality of artificial intelligence, the scope of exceptions should be wider than that of other works.”*

23) Should there be any new exceptions to Copyright specifically applicable to artificially-generated works?

- 19 Groups (50%) consider that NO NEW exception should apply to Copyright specifically applicable to artificially-generated works.
- 6 Groups (20%) consider that some NEW exception should apply to Copyright specifically applicable to artificially-generated works.

The Danish Group considers that: *“Big Data analyses require access to text and data mining and for this reason the decision to adopt rules thereon in the DSM Directive is a good one.”*

The Canadian Group notes, *“It may be that works which have some similarity but are derived from a different underlying AI system should be given some exceptions from infringement where the similarity is entirely due to machine activity divorced from any human skill and judgment. Consideration should be given to providing an exemption to allow use of another’s work for the purpose of training an AI entity to produce new works.”*

The Swedish Group observes, *“Ideally, Copyright protection should be left intact and apply the same way independent of work. However, taking into consideration the huge amount of data required to train AI, there might be a need to allow reproductions necessary to the performance of machine learning (based on the fair use-exception as known from the common law legal system). In order to prevent a vast exploitation of Copyright protected works, however, such reproduction exception could be limited to e.g. scientific or research purposes.”*

24) Moral Rights

a. Should moral rights be recognized in artificially-generated works?

The majority of Groups (55%) state that moral rights should be recognized only as to a human (author) involved in the creation of an AI generated work; no moral rights should be recognized without human intervention.

The Swedish Group considers that: *“Moral Rights should be relevant for AI-generated works when a human has intervened in the creation of the works to the extent that the human’s intellectual creation is reflected in the works, i.e. when the work is protected by Copyright. Similarly, for works that fall within the scope of any of the existing Related Rights, the applicable Moral Rights should apply in the same way for works created by an AI entity. However, if a new Related Right, specific for AI-generated works, would be included, one should only acknowledge limited Moral Rights.”*

The UK Group indicates that moral right should be recognized only if: *“a natural person directly responsible for an intellectual creation embodied in the work. Otherwise moral rights should not be recognized in artificially-generated works.”*

The German Group considers that: *“moral rights should also be attributed to the identifiable human author of an artificially-generated work. On the other hand, if purely computer-generated works were made accessible for protection, as in British law, only economic rights should be granted.”*

The Chinese Group considers that: *“Moral rights are created on the basis of human characteristics and are not applicable to machines. The moral rights (except for the right to claim authorship of a work) of artificially-generated works should not be recognized.”*

10 Groups (30%) consider that moral rights should NOT be recognized in artificially-generated works. For most of these Groups the reason is that moral right should be recognized only to human (author) involved in the creation of an AI generated work.

a. If yes, what prerogatives should the moral rights include (for example, the right to claim authorship of the work, the right to object to any distortion, mutilation or other modification of the work)?

- Most of the Groups which indicate the moral right should apply to artificially-generated works consider that the prerogatives should be IDENTICAL to others works.

The Chinese Group considers that only the right to claim authorship should apply.

b. If yes, who should exercise the prerogatives of moral rights?

- Most of the Groups indicate that the moral rights should be exercised by the creator/author of the works.
- 3 Groups (10%) consider that the moral right should be exercised by the investors, designers, users or trainers.
- 2 Groups consider that the moral right should be exercised by the owner of the program/machine.

Related Rights protection of artificially-generated works

25) Considering existing Related Rights, should any Related Rights apply to artificially-generated works?

- 17 Groups (55%) consider that EXISTING RELATED RIGHTS SHOULD APPLY to artificially generated works.

Such related rights are for instance phonograph, videogram, audiovisual communication companies, database producer, etc.

But no Group indicates that an existing related right should protect artificially generated works in general, *i.e.* for all artificially-generated works.

- 9 Groups (30%) consider that NO EXISTING RELATED RIGHT should apply to artificially generated works.

26) Should there be any new Related Rights specifically applicable to artificially-generated works?

- 12 Groups (40%) consider that NEW related rights should apply to artificially generated works.

The UK Group considers that: *“There are fundamental problems with extending traditional author’s rights to cover situations in which there is little or no human involvement in the creation of an artificially-generated work. In these situations, there may well have been substantial investment in the creation of such artificially-generated works which merits a reward incentive. Equally, the protection given to such works should arguably not be as strong as the protection for works created by a human author or this could have the danger of giving too much of an economic windfall to one actor who could continue to produce AI works with relatively little cost. This could also serve to devalue the intellectual creations of human actors.*

A new Related Right could be created to protect certain artificially-generated works which would otherwise be protected by copyright. This would serve to protect the investment that has gone into the creation of such works and reward creative use of machine learning tools but could be designed so that the protection granted is less extensive than that granted to human works. This would preserve value in ‘direct’ human creativity, which should receive stronger protection, but also protect works and encourage investment in human / artificially-generated works that also deserve a degree of protection.

Introducing a new Related Right would allow greater freedom so that the right could be crafted to suit the particular nature of artificially-generated works. It would serve to protect those types of work capable of qualifying for Copyright protection but which fail so to do due to not meeting the traditional criteria for Copyright protection.”

The German Group is of the following opinion: *“Merely AI created works do not deserve Copyright protection because of the lack of human input. Nevertheless, Related Right protection should be available for merely AI created works, in case the Related Right protects the investment into creating the work. Also, investment into AI seems worth protection in general. The German group is even of the opinion that a new Related Right should be introduced to cover the work categories which are so far not covered by Related Rights, for example solely AI produced works of art.”*

The Swedish Group proposes to include a new Related Right for AI-generated works, when created with no or minimal human intervention and where the resulting work does not qualify for any of the already existing Related Rights.

The Brazilian Group considers that: *“Considering that Related Rights are one statutory door to assign protection to works in relationship to their economic enablement, a new related right could be created to assure that those who make the creation of the work possible are entitled to exclusive much in the manner that current statute attributes rights to the phonographic producer and the broadcaster.”*

The Austrian Group summarizes the situation by indicating that, for full autonomous created works without human influence, *“There are two situations that have to be solved in a harmonized manner.*

- *If human intervention is a requirement for the protection of the artificially-generated work, there are already national rules for analysing who has influenced the robot in such a creative manner that he would be treated as author (or co-author). This could be for instance, the developer of the algorithm or the entity that introduced the algorithm in a robot. Hence, it is a case-by-case decision depending on the circumstances of a case that will be determined by the national courts.*
 - *For such cases, where the AI-entity is able to fully autonomous create a work, and hence, there is no human influence in the output, no regulations exist. These circumstances could be relevant for finding new rules in the sense of Related Rights”.*
- 15 Groups (50%) consider that NO NEW related rights should apply to artificially generated works.

The Chinese Group considers that: *“The Related Rights refer to the rights which protect the legal interests of certain persons and legal entities that contribute to making works available to the public. The rights are recognized because of the role of these entities in making works available to the public which contain sufficient creativity to justify the recognition of a copyright-like property right. In the Working Example, the process of artificial intelligence producing certain works does not reflect the communication to the public of the works, so the Related Rights may not be applicable.”*

The French Group consider that: *“the investor who developed the machine implementing the artificial intelligence should not enjoy a related right in the artificially generated works solely because it developed the machine. Indeed, the intellectual property rights that it may enjoy in the machine itself or potentially in the databases used in the context of the creation, the right of material ownership in the artificially-generated works, as well as unfair competition law, offer sufficient means to ensure its protection and to allow it to recoup its investment.*

In the absence of proprietary rights in an artificially-generated work, its designer-operator will not be without protection and can oppose or prevent the disclosure of the know-how necessary to its development:

- (a) through the mechanism of trade secret,*
- (b) through the general law of extracontractual civil liability, to oppose or prevent any illegal use,*
- (c) and lastly through technological protection measures.”*

The Belgium Group considers that: *“the current “state of play” does not allow the questions raised (...), for the following reasons:*

- (i) At this point, there is anything but a consensus as to whether works exclusively generated by AI should be protected by Copyright and/or a Related Right;*
- (ii) Under those circumstances, it appears premature to design (tailor-made) rights without the support of a majority;*
- (iii) Only if and when a majority votes in favour of a protection by Copyright and/or a Related Right will it make sense to design rights that seem appropriate;*
- (iv) The design of rights, either new rights or new features of existing rights, if any, should happen at an international level from the very beginning, it being understood that each country should be consulted in a second phase;*
- (v) The design of rights, either new rights or new features of existing rights, could be prepared by an international ad hoc Committee composed of academics, practitioners, enterprises and members of civil society.”*

The Italian Group argues that the question should be answered on the basis of sound economic arguments, e.g. whether protection should be granted to avoid a market failure and, in that case, to whom. “At present, it seems to us that economic evidence lacks and that, on their account, innovators have not raised concerns as to the fate of their investments in these technologies. Therefore, we think that – at least for the time being- it is preferable to keep status quo.”

27) If an existing or new Related Right is applicable to artificially-generated works, what requirements should be conditions for protection?

- For Groups which consider that EXISTING related right should be applicable to artificially-generated works (30%), the vast majority consider that the requirements should not be changed.
- For Groups which consider that a NEW related right should be recognized (40%), the proposed requirements for the protection differ from existing related rights, but are not homogeneous.

The most cited conditions are “investments” and “originality”. See for instance:

The UK Group proposes to protect only “works which fall within the existing definitions of literary, dramatic, artistic and musical works but would lack copyright protection because they lack any natural person directly responsible for the intellectual creation (qualification by a third party)” and to create a new “objective originality test.”

The Singapore Group proposes that: “The conditions for applying a new Related Right would be that the work in question falls within the category of literary, dramatic, musical or artistic work and that the work reaches a certain threshold of “originality” similar to the requirement set for Copyright protection. However, no human intervention would be required (i.e. it would not need to reflect the (human) author’s personality). The exact scope and detailed requirements for protection under this new Related Right will have to be clarified through judicial precedents.”

The Finnish Group considers that “In case a new Related Right were, however, to be adopted, in order to avoid mere mathematical patterns to be granted protection, a creative step and/or significant investment in the process of artificial-generation should be required. The artificial generation should have considerable impact on the creation of the work to the extent that no human could have achieved the same outcome without artificial-generation, or the artificial-generation is otherwise central in the creation process of the work.”

The German Group proposes the following conditions for protection: proof of creation, others formalities, and actual use/exploitation.

The Chinese Group the following conditions: originality, reproducibility, and reflection of the communication to the public.

The Austrian Group considers that the condition for protection should be the investment made in algorithm and the initial training of the AI entity.

The Japanese Group points out that: “According to our Opinion B1 (protection by related rights) or B2 (protection by sui generis protection under a different system than the Copyright Act), AI-generated works would be protected differently from human-

created works. In such a case, it would be necessary to address the following issues: a copyright credit (whether/how to indicate that the content was generated by AI), misleading indication (as if it were created by a human), and penalties for false indications. There is also a question of whether to establish rules on indication of the name of the person who developed the relevant AI.”

28) Which Related Rights’ economic rights and moral rights should apply to artificially-generated works?

- Groups which consider that NEW related right should protect artificially-generated works (40%)

Groups that are in favor of the recognition of a new related right for AI works consider generally that economic rights should apply, e.g. copying and communication to the public.

But the vast majority of the Groups consider that moral right should NOT apply, because moral right can be recognized only to human.

The Swedish Group proposes that the moral right: *“should only apply to AI-generated works with regards to the right of attribution and the right to have a work published anonymously or pseudonymously but not to the integrity right. The latter because integrity and respect does not apply to AI entities, i.e. the honour of the AI entity cannot be disrespected.”*

The Chinese Group considers that *“AI works should not be protected. OR economics rights depend on the level of technology development and moral rights may include the right to claim authorship of a work”*.

- Groups which consider that EXISTING related right should protect artificially-generated works (56%)

Regarding Groups which consider that only existing related rights should apply to AI works, 8 Groups consider that the same rights should be recognized.

29) Who should be the original owner the Related Right?

- Groups which consider that NEW related right should protect artificially-generated works (40%)

The majority of the Groups consider that the investor (natural or legal person) should be the original owner of the artificially-generated works.

For instance, the UK Group presents the 2 different approaches (*“proximity approach”* and *“investment approach”*) and supports the second one: *“The UK report considers that there are a range of actors associated with the creation of an artificially-generated work who might potentially qualify as owners. These include any person or entity that (1) invests resources (whether financial, human or technical) (AI Project Investor); (2) assumes responsibility for making the necessary arrangements (AI Project Arranger); (3) authored an AI Entity deployed in the creation (AI Coder); (4) selected the goal/objective to be achieved (AI Goal Selector) (5) selected the data for input to the AI Entity (AI Data Selector); (6)*

trained the AI Entity (**AI Trainer**); and/or (7) made a qualitative or aesthetic selection of a work from a number of new artificially-generated works (**AI Output Selector**).

Two alternative approaches to ownership of the new Related Right are possible, namely (1) the person/entity that is most closely associated with the creative output of the trained AI Entity (the 'proximity approach') or (2) the natural or legal person who makes the arrangements necessary for the creation of the work (the 'investment approach').

The UK report is in favor of the investment approach, because it arguably provides more certainty than the proximity approach, as well as an incentive to invest in technologies for artificially-generated works."

According to the Finish Group, "to the extent an existing Related Right would apply, the right should, in accordance with the criteria currently applicable to Related Rights, be formed to a natural person, a group of natural persons or (more commonly) to legal person, who created the artificially-generated work by applying financial and professional investment during the creation process. The mere creation of the generator or algorithm without applying it creatively would, however, not result in ownership of the new Related Right."

The Swedish Group considers that "the person making the necessary arrangements/investments in relation to the creation of the work" should be the original owner.

- Groups which consider that EXISTING related right should protect artificially-generated works (55%)

Groups that consider that only EXISTING related rights should apply to AI works, are in favor that the existing regulations should apply in order to determine the original owner of artificially-generated works.

30) What should be the term of protection of the Related Right?

- Groups which consider that NEW RELATED RIGHT should protect artificially-generated works (40%)

The majority of the Groups considers that the term of protection should be SHORTER than for copyright.

The German Group justifies such shorter term by the following: "The term of protection in general should be shorter than that of traditionally made works, taking into account (i) the respective contributions of human beings and of the AI in the work and (ii) the reduction in costs by using the AI in generating the works, both to safeguard the rights of traditional authors from being replaced by the cheaper labour of AI."

The Swedish, Austrian and Finnish Groups propose 15 years, that is a term similar to that for database. The Dutch Group proposes 3 years. The Brazilian and Paraguayan Groups propose 70 years.

- Groups which consider that EXISTING related right should protect artificially-generated works (55%)

The majority of the Groups consider that the term should be identical as for others works.

31) Please comment on any additional issues concerning any aspect of Copyright protection and Related Rights protection for artificially-generated works you consider relevant to this Study Question.

The Belgian Group makes the following recommendations: *“(i) To establish an international committee (...) composed of academics, practitioners, enterprises, and members of civil society; (ii) To instruct the committee to give an opinion on the preliminary question as to whether it is desirable to protect works exclusively generated by AI through Copyright and/or a Related Right.”*

32) Please indicate which industry sector views provided by in-house counsel are included in your Group's answers to Part III.

Some Groups did include views of various industry sectors in their reports.

IV. Conclusions

A clear majority of the responding Groups considers that harmonization regarding the protection of artificially-generated works is desirable.

The majority of Groups consider that AI generated works should be protected by Copyright if there is sufficient human intervention in the creation of the work. On the contrary, these Groups feel an AI generated-work should not be protected by Copyright without human intervention.

There is no clear majority amongst the Groups at which step of the creation, human intervention should be required: creation of the AI entity to achieve a particular goal, data selection to be input, creation of the new work, etc.

There is consensus that originality of the final work should be a condition for the protection by Copyright.

The majority of the Groups consider that the regime (economic and moral rights, term) should be identical to the “normal” works protected by Copyright.

There is consensus that moral rights should be recognized only to humans involved in the creation of an AI-generated work and that no specific exception should apply to AI-generated works.

There is also a majority view that the original owner of the AI-generated work should be determined according to the general rules governing copyright.

The majority of the Groups consider that AI generated works should be protected by Related Rights, if they fulfil the actual criteria.

An important minority of Groups (40%) proposes to introduce a new Related Right for the protection of AI generated works in order to incentivize investments and/or to limit the scope of the protection of such AI generated works. The most cited requirements for protection are

originality of the final work and investments made in the process of artificially-generation of the work. Such a new Related Right should comprise economic rights such as copying and communication to the public.

The majority of the Groups in favour of the creation of a new Related Right consider that the investor in the AI entity should be the original owner of the final work.

These Groups consider that the moral right should not be recognized on AI generated works. They also consider that the term should be shorter than for other copyrightable works.

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