

RELX response to World Intellectual Property Organization's Draft Issues Paper on Intellectual Property and Artificial Intelligence

Introduction

RELX welcomes the opportunity to provide input to the World Intellectual Property Organization's Draft Issues Paper on Intellectual Property Policy and Artificial Intelligence, which is an important and timely contribution to the discussion around the impact of Artificial Intelligence technologies on Intellectual Property policy.

RELX is a global provider of information-based analytics and decision tools for professional and business customers across a range of sectors, including financial services, science, technology, medical, healthcare and energy. RELX is the parent company of Elsevier, the world's leading publisher of scientific and medical journals, and LexisNexis, a provider of data analytics for governments, law enforcement and businesses as well as a news and information source for the legal communities. We employ 33,000 people worldwide and support customers in 180 countries. We utilise technology and data to help our customers improve their decision making across the sectors we serve. For example, we help:

- scientists make new discoveries
- doctors and nurses improve the lives of patients
- lawyers win cases
- prevent online fraud and money laundering and
- insurance companies evaluate and predict risk.

Artificial Intelligence (AI) and Intellectual Property (IP) are both key areas of interest for RELX's businesses. With an annual investment of \$1.4 billion into technology and with 8,000 of our 33,000 employees being technologists RELX is both a significant consumer and developer of the latest technologies, including techniques which fall within the broad definition of Artificial Intelligence. At the same time, Intellectual Property – primarily copyright - is a core component of RELX's business.

As requested in the Issues Paper, this response will not provide detailed answers to the questions posed. Instead, we have organised our comments around the following sections:

- General comments, covering definitional issues and fundamental principles
- Importance of IP to AI
- AI in IP Administration
- Ownership/Authorship of IP
- Infringement Issues
- Conclusions

General Comments

Artificial Intelligence is a broad discipline and has various definitions. These tend to be expansive, covering a broad range of technical approaches including machine learning, natural language processing and text & data mining, among other techniques. It would be helpful if WIPO could provide or develop a consensus definition of AI. This would bring clarity and help form a common language for future discussions regarding AI and IP issues.

Although national governments and international organisations have started adopting varying definitions for AI it would be beneficial to the policy debate if there was agreement on a universal

definition, although we recognise this will be difficult to achieve. For example, the Organisation for Economic Co-operation and Development (OECD) has adopted the following definition:

“An AI system is a machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations, or decisions influencing real or virtual environments. AI systems are designed to operate with varying levels of autonomy.”

The OECD’s definition could provide a useful basis for WIPO to consider which definition of AI it would like to adopt.

Importance of IP to AI

We believe that IP needs to be at the forefront of policy debates on AI. For AI systems to operate effectively and safely they have to be supplied with high-quality information. The best way to guarantee such quality is through copyright, which provides the underpinning mechanism which incentivises investment in its production and dissemination.

If machine learning tools are going to successfully deliver new insights and better understanding the information on which it is based must be valid. This is particularly true when discussing AI systems in scientific fields. There must be a high level of confidence that the information being fed to algorithms is of the best quality. The importance of this should not be understated. To use an example from RELX’s subsidiary company, Elsevier, a platform known as Entellect allows search and analysis across a wide range of databases to assist with drug development and clinical trials. When developing products which have the potential to deliver the most material impact on people’s lives it is crucial the information is valid and of high quality. Intellectual Property, such as copyright, has a clear role in incentivising investment into the creation of high-quality scientific research outputs and avoiding fake science.

WIPO, as it engages in discussions surrounding AI and IP, has a responsibility to demonstrate the value of investing in the creation and protection of IP because it will ultimately lead to better AI, which should be the pursuit of all involved.

Part of this will require WIPO making clear that an overarching principle of AI must be the continued respect for intellectual property rights. There is no legal or practical reason why the development and advancement of AI should undermine the basis of IP rights. While there may be questions of scale or licencing and implications for the operational side of the IP system, as WIPO has identified, this should not question the fundamental operation of IP itself.

Similarly, the development of AI should not be seen as an opportunity to weaken IP rights as has been suggested with previous developments in technology but successfully defended against. The fundamentals of the current IP system have been tested by new technologies in the past and continue to remain relevant and critical to the ongoing development of new innovative and creative systems and products.

Finally, the role of WIPO as an international organisation is critical. With different governments developing various AI strategies, all of which either directly or indirectly touch on IP, the IP and AI Strategy Clearing House proposed by WIPO could provide a valuable resource for organisations, such as RELX, involved in both developing AI and protecting IP. The Clearing House should have a clear and specified remit to ensure it has appropriate focus on IP issues relating to AI. It is worth noting these services can also be provided by the private sector. This is a capability RELX has had we would be very happy to discuss with WIPO how such a service could be delivered.

AI in IP Administration

While we acknowledge that this topic is not intended to be the focus of contributions, we thought it would be helpful to provide some comments. We believe WIPO's development of AI in IP administration will likely bring significant tangible benefit to businesses.

With an ever-expanding corpus and increasingly broad and complicated network of protected works to consider and identify in a global world, utilising automated and AI technologies to organise that material would benefit many. It is unimaginable that a human would be able to undertake this work, and AI is able to provide an additional level of objectivity to this process. We anticipate significant cost-savings from such an approach, and it would mitigate a problem that currently exists whereby there are not enough qualified IP experts available to do much of this work while the corpus continues to grow.

We apply these types of technologies to our own IP portfolio and would be happy to discuss our approach with WIPO.

Ownership/Authorship of AI

Questions of ownership, inventorship and authorship are asked by WIPO in the Issues Papers of both patents and copyright. This is a question particularly of whether works created by an AI system can be protected through the current IP system and indeed whether they should be.

In responding to these questions, we feel there are two important dimensions at play. There are some important philosophical questions about the production of creative content in an AI world and at the same time there are the legal, technical and practical considerations for those operating within the current system. Our view is the focus of WIPO's work should be on the current issues facing the IP system rather than looking to amend rules in response to considerations which have to yet materialised.

Within that context, when it comes to the requirement for human involvement in the creation of a work or invention, until now courts generally have confirmed that human involvement is required for such works to be eligible for intellectual property protection. We believe this is the correct interpretation and approach and that it is only humans to which IP rights can and should be attached, at least for the time being and within the current system.

We believe the current concepts of ownership or authorship, as covered within our current legal framework are sufficient to address the issues being raised by the development and use of AI systems. Therefore, we do not see a need for a major overhaul of the law. While it is evidently possible for computerised systems to create new works, this should not require any putative IP rights to be attributed to the computerised system itself. Under current (and foreseeable future) systems, a human will always have been involved in the creation of the computerised system or algorithm that created such a work. This involvement will entail the ownership, conduct or control of the computerized system or algorithm. By extension, this is where responsibility and liability for such systems would sit. For now, it is relatively simple to identify a human or humans involved in the creation of works. Allocating IP rights to machines would constitute a fundamental and unnecessary shift in accepted norms with unintended consequences.

By analogy, it is relatively commonplace for any intellectual property generated by an employee (such as a journalist) in the course of their employment to be assigned to the employer rather than the employee. The same principle can apply to works created by AI systems under the responsibility of the system's human owner.

Ultimately, to identify where to attach property rights one must identify which human or humans oversees the AI process which has led to the creation of works and where ultimate liability and responsibility for the AI system's actions sits. It is possible that future technological changes force a change in these assumptions however our view is that such a situation is suitably distant that policy makers shouldn't be concerned with it now.

Infringement Issues

Typically, the development of AI systems require access to large quantities of data in order to train and improve them. This training data often includes copyrighted works and indeed the best quality training data is the result of significant levels of investment by the copyright holder. To ensure the continuing development of high-quality content this data and materials require IP protections.

It should also be made clear that when WIPO refers to 'data subsisting in copyright works' in its questions, it is actually referring to 'copyright works'. This is an important distinction when considering the need to continue to recognise the importance and value of intellectual property in an AI world.

While it may be true that AI systems require access to large quantities of data, this fact should not call into question the ability of rightsholders to protect their copyright if they choose to do so via technical or legal means.

Such mechanisms already exist to provide licences and other arrangements should the rightsholder wish to share of licence their high-quality data or content to develop AI programmes or outputs. These systems are already capable of dealing with the development of AI. Thus, there is no basis to the claim that IP rights act as a barrier to the development of AI or block the free flow of data.

Although there are varying approaches around the world, thanks to the Berne Convention there is international agreement that RH rightsholders are able to protect their copyrighted works. A recognition of this right of ownership by those who would seek to undermine copyright would be more beneficial than the creation of any new rights. Additionally, stronger enforcement of those rights would also help the rightsholder position and prevent the need for additional rights to be created.

Previous discussions around text and data mining, a key technique within the broad field of AI, can also be used as a basis here, both in terms of data owners being able to protect their rights as well as what constitutes infringement. In April 2019 the European Union introduced the Digital Single Market Directive, which is currently being implemented across the 27 Member States of the EU. The copyright provisions within this Directive relating to text and data mining (Articles 3 and 4) represent a useful compromise position between those wishing to reproduce protected works in order to train or use AI systems and the interests of the rightsholders in those works. We recommend that WIPO have regard to these provisions in its deliberations in this area.

Similarly, given there are different approaches to trade secrets laws around the world, a useful discussion could be convened by WIPO to encourage greater harmonisation in the use of trade secret protections. Again, this would likely be more useful than a new data right.

Conclusion

RELX welcomes the opportunity to respond to WIPO's Draft Issues Paper on this important topic, touching on a number of key issues for RELX's businesses. RELX would also encourage WIPO, and national IP offices, to engage with broader policy discussions taking place around AI to ensure that well intentioned initiatives do not inadvertently undermine IP.

RELX notes that a second session of the WIPO conversation on IP and AI is planned for May 2020 and would welcome the opportunity to contribute to that discussion. We remain available to discuss this response and any inquiries about our ongoing work related to AI.

For further information on this submission, or for further discussions please contact:

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