

Emerging Risks and the European Liability Framework in AI-Based Market Manipulation



Andrea Mecchina, Lorenzo Basile, and Luca Bortolussi

Abstract Artificial Intelligence (AI) is rapidly reshaping global economics and this transformation is particularly impacting banks and investments firms, as they started to develop and adopt AI-assisted trading algorithms. Because of the very nature and cutting-edge complexity of these new technologies, they are also bound to give rise to new and unprecedented risks, particularly affecting individuals and human competitors. Industries adopt AI-based solutions in their working pipelines in order to deliver efficiency gains and produce more profit. Due to their exponentially rapid development, these new solutions are acting as increasingly independent agents. Despite having been developed by humans, such forms of AI might misbehave in ways which are unacceptable to a human competitor, even without being explicitly programmed to do so. Adequate legal instruments are required to prevent potential threats resulting from concurrent human–machine interactions. Nonetheless, AI-trading solutions are difficult to fit into the current European Union legal framework concerning market manipulation, especially when trying to assess liability under traditional legal concepts such as *intent*, *causation* and *foreseeability*, which were originally developed when dealing with human-only agents. Rules struggling to keep up the pace with technological innovation is a documented and well-known phenomenon that has been observed at least since the rise of industrial capitalism. The main current European Union regulatory instruments to contrast AI-based harms in this context are the European Market Abuse Regulation (EU) No 596/2014 and the Market Abuse Directive 2014/57/EU, which date back to 2014. Technological progress comes accompanied by a continuous blurring of the boundary between humans and machines. Addressing the liabilities of the new machine agents that coexist and interact with humans calls for an up-to-date legal framework. This paper aims to highlight emerging human vulnerabilities and critically investigate the current European Union legal framework.

A. Mecchina (✉) · L. Bortolussi
University of Trieste, Trieste, Italy
e-mail: andrea.mecchina@phd.units.it

L. Basile
AREA Science Park, Trieste, Italy

Keywords Artificial intelligence · Vulnerability · Market manipulation · Liability · Algorithmic trading

1 Introduction

The challenge of regulatory systems struggling to keep pace with technological innovation is a well-documented and long-standing phenomenon, present since the rise of industrial capitalism, the era that gave rise to modern finance.¹

The development of AI and its application in the field of algorithmic trading allowed to draw some causal inference conclusions about how these new technologies impact in a positive manner the quality of the market itself.² On the other hand, AI-driven approaches to algorithmic trading introduce a new set of unprecedented risks, with the most sophisticated involving complex forms of market manipulation.

European Union laws offer regulators and enforcers a clear definition of market manipulation, which will be discussed further. Additionally, there are tools available to assess liabilities. However, legal frameworks often become outdated quickly, primarily due to the rapid advancements in AI and algorithmic technologies.³

New and unprecedented vulnerabilities emerge for competing agents operating alongside these new technologies. Building upon the work of Azzutti,⁴ this paper critically investigates them, in the perspective of the current European Union rules. The rest of this contribution is organised as follows: Sect. 2 presents various forms of AI-based market manipulation and explores the emerging risks; Sect. 3 presents the current European Union regulatory framework, with a focus on liability issues; finally, Sect. 4 provides a summary and conclusion.

2 AI-Based Market Manipulation

A first legal definition of market manipulation is provided in the Market Abuse Regulation (EU) No 596/2014 (European Parliament, Council of the European Union (2014b)). Quoting Article 12: “[...] market manipulation shall comprise the following activities:

- (a) entering into a transaction, placing an order to trade or any other behaviour which:

¹ Fenwick et al. (2016).

² Boehmer et al. (2021).

³ Dutta (2018).

⁴ Azzutti (2022).

- (i) gives, or is likely to give, false or misleading signals as to the supply of, demand for, or price of, a financial instrument, a related spot commodity contract or an auctioned product based on emission allowances; or
 - (ii) secures, or is likely to secure, the price of one or several financial instruments, a related spot commodity contract or an auctioned product based on emission allowances at an abnormal or artificial level; [...]
- (b) entering into a transaction, placing an order to trade or any other activity or behaviour which affects or is likely to affect the price of one or several financial instruments, a related spot commodity contract or an auctioned product based on emission allowances, which employs a fictitious device or any other form of deception or contrivance;
- (c) disseminating information through the media, including the internet, or by any other means, which gives, or is likely to give, false or misleading signals as to the supply of, demand for, or price of, a financial instrument, a related spot commodity contract or an auctioned product based on emission allowances or secures, or is likely to secure, the price of one or several financial instruments, a related spot commodity contract or an auctioned product based on emission allowances at an abnormal or artificial level, including the dissemination of rumours, where the person who made the dissemination knew, or ought to have known, that the information was false or misleading;
- (d) transmitting false or misleading information or providing false or misleading inputs in relation to a benchmark where the person who made the transmission or provided the input knew or ought to have known that it was false or misleading, or any other behaviour which manipulates the calculation of a benchmark. [...]"

The reported definition is quite general, as it identifies as forbidden market practices also those behaviours which are not explicitly programmed to manipulate the market, but which are also “likely to” do it. Such broad definition is meant to encompass also manipulations arising from the developing field of AI, which are to be discussed next.

2.1 Emerging Manipulation Scenarios

The adoption of AI systems translates into delegating cognitive decisions to a new set of tools which we define “intelligent”, with the ability to self-learn and adapt autonomously to the environment through their experience, while pursuing a pre-defined goal.⁵ This very new autonomy brings unprecedented risks and comes accompanied by new ethical and legal questions, which regulators need to address. We also refer to Annunziata for an additional discussion on how recent developments in the

⁵ Dellermann et al. (2019).

AI field affect the enforcement of rules in the European Union to prevent market abuse.⁶

Algorithmic trading is used to refer to any technology-based instrument which assists and automates, completely or even partially, any task within the trading cycle.⁷ With the advent of AI, the paradigm of algorithmic trading shifted from an “if/then” logic, thought of as a tool to assist human experts, to much more advanced systems able to self-learn without the need of human supervision. This step forward has been possible mainly thanks to the development of Machine Learning (ML), building upon the exponentially increasing data availability and the progress in technological computational power.⁸

In the risk framework defined by European Parliament, Council of the European Union (2024), AI-based trading methods are not labelled as “high-risk”, despite coming accompanied by the typical risks of data-driven ML applications, most notably: they are built upon very complex and interconnected domain-specific knowledge, they are “autonomous”, as their behaviour is not explicitly programmed by the human experts who realised the systems, and they are often considered “black-boxes”, in the sense that not even the experts who developed these methods are able to explain in full detail why and how a particular result was obtained.⁹

Such technical aspects are mentioned to shed some light upon the difficulties a classical liability framework could face when trying to prevent and punish AI trading misconduct and potential harm.¹⁰ Neglecting the case of a system whose functioning is compromised by some external party, it is possible to summarise two distinct possible scenarios of market manipulation:

- the misbehaviour of a system might be due to its developers, either through their negligence, in the form some sort of code “bugs”, or their intentional actions;
- the AI system may self-learn to perform market manipulations thanks to its “intelligent” component, drawing its conclusions from the data it is trained on, while pursuing its predetermined goal, even without an explicit human design.

It is also worth pointing out that law enforcement authorities would be required to possess some sophisticated manipulation diagnostic instruments, together with advanced and specific knowledge of the both the financial and the AI sectors. Moreover, in the current fast and ubiquitous market systems, manipulations could take the form of flash-crashes and ultra-fast and extreme events,¹¹ thus complicating their detection tasks even more.

⁶ Annunziata (2023).

⁷ Kirilenko and Lo (2013).

⁸ Koshiyama et al. (2020).

⁹ Burrell (2016).

¹⁰ Azzutti (2022).

¹¹ Johnson et al. (2013).

2.2 A View on Reinforcement Learning

Reinforcement learning is a machine learning paradigm which can be used to improve the efficiency and performance of decision-making strategies. Here, a brief overview of reinforcement learning is given,¹² with a focus on its relationship with a more traditional point of view on trading markets.

Reinforcement learning is based on training an agent how to operate in an environment based on a system of rewards. In the context of trading, an example would be an agent that learns how to optimise a portfolio based on metrics like profit, loss, volatility, and so on. Some crucial features of any reinforcement learning systems are:

- Agent: the trained AI system, which interacts with the environment;
- Environment: anything which gives us back an observable state;
- State: the current position of the agent;
- Action: the optimal decision taken by the agent, based on the current state;
- Reward: a quantity returned by the environment, which may evaluate positively or negatively on the action taken by the agent.

The general idea behind reinforcement learning is trying to train the agent to take actions in order to maximise some function of the rewards.

Through the rewards it receives from the environment, the agent collects information and learns a strategy which is not explicitly programmed, following an “if/else” logic, by its developer.

The above definitions are quite general; in the context of trading, they can take some more precise meanings: the agent is a trader, the environment is the market, the state is related to some statistics about the market itself which are observed, which may be daily log-returns, volumes of assets and so on, an action might be going long or short on certain assets and the reward might be profit, volatility or more complex measures such as the Sharpe ratio.

One major point of reinforcement learning is that the agent will not learn to give a prediction like some expected values of some relevant financial quantities or the sentiment of a document, but rather it will try to maximise a reward function, which might be, for example, related to the expected return of a portfolio and so on.

It is worth pointing out that reinforcement learning is not an isolated method, but it can be easily integrated with other ML techniques such as deep learning, giving even higher freedom to the agent. In particular, it is possible to use neural networks, such as LSTM networks,¹³ which are particularly suited to work with time series, thus exploiting in an efficient way the natural structure of financial data.

In general, neural networks can be used to obtain more precise expectations, which will be then fed to the reinforcement learning algorithm with the goal of optimising its performance. This interconnection between reinforcement learning and neural

¹² Foy (2021).

¹³ Viera (2019).

networks makes AI-based training algorithms even more complex, due to the typical “black-box” nature of deep neural models.

The above considerations stress the considerable amount of autonomy those systems have. Such new technologies have the potential of transforming the financial industry, as to some extent is already happening, calling for more dedicated rules, able to counter the misbehaviour of AI-based agents.

3 Current European Union Rules

A first legal instrument available for European Member States, under the European Union law, is the aforementioned Market Abuse Regulation (EU) No 596/2014 (European Parliament, Council of the European Union (2014b)). As stated in Article 1, such regulation explicitly prohibits market manipulations, as it reads: “This Regulation establishes a common regulatory framework on insider dealing, the unlawful disclosure of inside information and market manipulation (market abuse) as well as measures to prevent market abuse to ensure the integrity of financial markets in the Union and to enhance investor protection and confidence in those markets.”

The definition of market manipulation reported in Sect. 2 suggests that the legislators opted for an “effect-based” specification, due to the adoption of broad expressions such as “entering into a transaction” or “disseminating information”. The definition does not take into account any subjective component: the specific intent of the manipulator is not considered to be relevant.

It is worth recalling the distinction, as it will be discussed more extensively in the following subsections, between a natural and a legal person, in the jurisdictional context:

- a natural person is a human person; in the financial context, a natural person might be the employee of an investment firm;
- a legal person is, in the broader meaning, any “thing” that can do the same things a human person can do; in the financial context, a legal person might be an investment firm.

Article 15 of the Market Abuse Regulation (EU) No 596/2014 explicitly states that “A person shall not engage in or attempt to engage in market manipulation.”; such definitions puts on equal grounds any manipulative intent, notwithstanding its successful implementation.

The above definition refers both to natural and legal persons, but for the purposes of the discussed regulation, it is not clear whether an AI-based system might be considered a “person” in such sense. As it emerges from the subsection dealing with reinforcement learning, it is clear that AI-systems might share some features of natural or legal persons; nonetheless, they possesses some unique aspects which make them difficult to fit into traditional frameworks, which will be discussed next.

3.1 *Administrative Liability Framework*

Violations of market through non-manipulative conduct, if not extremely serious and harmful, can be addressed in the framework of administrative liability, which is regulated explicitly by the Market Abuse Regulation (EU) No 596/2014 (European Parliament, Council of the European Union (2014b)).

Article 22 states that “Without prejudice to the competences of the judicial authorities, each Member State shall designate a single administrative competent authority for the purpose of this Regulation. [...] The competent authority shall ensure that the provisions of this Regulation are applied on its territory, regarding all actions carried out on its territory, and actions carried out abroad relating to instruments admitted to trading on a regulated market, for which a request for admission to trading on such market has been made, auctioned on an auction platform [...]” Thus, the regulation states that administrative liability should be enforced by national competent authorities of Member States.

Moreover, Article 16(1) requires market operators to adopt procedures aimed at preventing and detecting market manipulations Article 16(2) requires the same operators to report to the competent authorities every reasonable suspicion of market manipulation they may encompass.

Article 30(2) tries to define a set of administrative sanctions which each Member State should be able to dispose of: “Member States shall, in accordance with national law, ensure that competent authorities have the power to impose at least the following administrative sanctions and to take at least the following administrative measures [...]:

- (a) an order requiring the person responsible for the infringement to cease the conduct and to desist from a repetition of that conduct;
- (b) the disgorgement of the profits gained or losses avoided due to the infringement insofar as they can be determined;
- (c) a public warning which indicates the person responsible for the infringement and the nature of the infringement;
- (d) withdrawal or suspension of the authorisation of an investment firm; [...]
- (h) maximum administrative pecuniary sanctions of at least three times the amount of the profits gained or losses avoided because of the infringement, where those can be determined; [...]

Moreover, such article prescribes pecuniary sanctions both with respect to natural and legal persons. In the context of an AI-trading system, the enforcement of point (a) seems particularly challenging, as it would require the developers to alter the same trading system, which may not have been developed with the goal of committing any infringement at all.

Additionally, Article 23(2) also specifies that each national competent authority should enjoy a certain number of investigatory powers: “In order to fulfil their duties under this Regulation, competent authorities shall have, in accordance with national law, at least the following supervisory and investigatory powers:

- (a) to access any document and data in any form, and to receive or take a copy thereof;
- (b) to require or demand information from any person, including those who are successively involved in the transmission of orders or conduct of the operations concerned, as well as their principals, and if necessary, to summon and question any such person with a view to obtain information; [...]
- (d) to carry out on-site inspections and investigations at sites other than at the private residences of natural persons;
- (f) to refer matters for criminal investigation;
- (g) to require existing recordings of telephone conversations, electronic communications or data traffic records held by investment firms, credit institutions or financial institutions; [...]"

Most critically, Article 13 provides a list of accepted market practices, which may be of use of investment firms: if they could prove that an alleged manipulative behaviour was indeed compliant with the accepted practices, they could prevent being subject to administrative liability. In particular Article 13(2) reads: "A competent authority may establish an accepted market practice, taking into account the following criteria:

- (a) whether the market practice provides for a substantial level of transparency to the market; [...]
- (c) whether the market practice has a positive impact on market liquidity and efficiency; [...]
- (e) whether the market practice does not create risks for the integrity of, directly or indirectly, related markets, whether regulated or not, in the relevant financial instrument within the Union; [...]"

In order to ease the work of law enforcement authorities, the Market Abuse Regulation (EU) No 596/2014 provides in Annex I two sets of indicators which could raise a presumption of manipulation. In particular, indicators related to "false or misleading signals" suggest to investigate the "extent to which orders to trade given or transactions undertaken" relate to some meaningful indicators such as the daily transactions volume in the related financial instrument or the time of day around which the transactions happen. Complementarily, in order to discover manipulations related to "deception or contrivance" instead, it is suggested to deem as suspect those trade orders preceded by the dissemination of any misleading information or investment recommendation by the same persons undergoing the trade or by other persons close or linked to those undergoing the trade. Again, it seems that such indicators were created having in mind the activity of a person, be it natural or legal; it is therefore hard to apply the same indicators to an AI-driven activity.

3.2 *Criminal Liability Framework*

The Market Abuse Regulation (EU) No 596/2014, at Article 30(1) subparagraph 2 states that Member States are allowed not to apply the administrative sanctions prescribed by the regulation itself, as long as the same infringements are subject to criminal sanctions in the national laws. On the other hand, if a state opted for both administrative and criminal sanctions for the same infringement, it must ensure to respect the jurisdictional principle of “ne bis in idem”, stating that a person cannot be subject to a criminal proceeding for which the same person has already been judged.¹⁴

The legal instrument available to Member States to address criminal liability, and in general to provide a set of common rules for the most dangerous market manipulation cases, is the Market Abuse Directive 2014/57/EU (European Parliament, Council of the European Union (2014a)). In particular, Article 5(1) reads:

1. Member States shall take the necessary measures to ensure that market manipulation [...] constitutes a criminal offence at least in serious cases and when committed intentionally.
2. or the purposes of this Directive, market manipulation shall comprise the following activities:
 - (a) entering into a transaction, placing an order to trade or any other behaviour which:
 - (i) gives false or misleading signals as to the supply of, demand for, or price of, a financial instrument or a related spot commodity contract; or
 - (ii) secures the price of one or several financial instruments or a related spot commodity contract at an abnormal or artificial level;
unless the reasons for so doing of the person who entered into the transactions or issued the orders to trade are legitimate, and those transactions or orders to trade are in conformity with accepted market practices on the trading venue concerned;
 - (b) entering into a transaction, placing an order to trade or any other activity or behaviour which affects the price of one or several financial instruments or a related spot commodity contract, which employs a fictitious device or any other form of deception or contrivance;
 - (c) disseminating information through the media, including the internet, or by any other means, which gives false or misleading signals as to the supply of, demand for, or price of a financial instrument, or a related spot commodity contract, or secures the price of one or several financial instruments or a related spot commodity contract at an abnormal or artificial level, where the persons who made the dissemination derive for themselves or for another person an advantage or profit from the dissemination of the information in question; or

¹⁴ Bošković and Kostić (2020).

- (d) transmitting false or misleading information or providing false or misleading inputs or any other behaviour which manipulates the calculation of a benchmark.

Point 2 provides a definition of market manipulation which mimics that of the Market Abuse Regulation (EU) No 596/2014. The only difference is that in the above one, the expression “is likely to” do not figure. A “preponderance of the evidence” of market manipulation, as required by the Market Abuse Regulation (EU) No 596/2014 to constitute an administrative offence, does not suffice for the Market Abuse Directive 2014/57/EU, which requires the manipulation to be ascertained “beyond a reasonable doubt” in order to be deemed as a criminal infringement.¹⁵

Anyway, a precise definition of the term “serious” is not provided; Article 6(1) also states that: “1. Member States shall take the necessary measures to ensure that inciting, aiding and abetting the offences referred to in Article 3(2) to (5) and Articles 4 and 5 is punishable as a criminal offence. [...]” Therefore, Member States are required also to act in a preventive manner. Article 7(1) requires the criminal penalties enforced by Member States to be “effective, proportionate and dissuasive” and Article 7(2) requires the offences to be punishable “by a maximum term of imprisonment of at least four years”.

Mimicking again the prescription of the Market Abuse Regulation (EU) No 596/2014, Article 8(1) of the Market Abuse Directive 2014/57/EU extends criminal liability also to legal persons for offences committed for the benefit of the legal persons themselves by any person playing a leading role within the legal persons.

The Market Abuse Directive 2014/57/EU, since it does not differ considerably from the dispositions of the Market Abuse Regulation (EU) No 596/2014, suffers from the same problems of applicability already highlighted, when the agents are neither natural nor legal persons, but rather AI-driven agents.

4 Conclusions

The rationale behind the presented European Union legal framework is to establish a common level between Member States, to uniform and provide national competent authorities with some instruments to fight AI-based trading market manipulation. The current liability framework, as presented in the Market Abuse Regulation (EU) No 596/2014 and the Market Abuse Directive 2014/57/EU, does not fit in a straightforward manner to all categories of AI algorithms, mainly because of their very “black-box” nature. On top of this, also detecting increasingly complex and sophisticated forms of AI trading manipulations is a challenging task for market supervising authorities.

Moreover, for investment firms, it suffices to produce an annual self-assessment to show their compliance to the current AI-based trading rules, as can be read in Article 9

¹⁵ Azzutti (2022).

referenced from European Commission, Directorate-General for Financial Stability, Financial Services and Capital Markets Union (2017). This requirement might not be strict enough to ensure that the described rules are successfully enforced.

Moreover, it is worth adding that the outlined rules suffer from the issue of “divided interpretation”: prohibitions are free to be enforced in different ways by any national competent authority. As a consequence, these uneven legal frameworks also expose markets to some complex forms of cross-border manipulations, while preventing the successful creation of a single European market.

We can add to the “divided interpretation” problem some other factors which could postpone the adoption of an effective anti-manipulation regime. First of all, some uncertainty in the prohibitions themselves, even if left over on purpose in order to extend the application scope of the legislations, could not be enough to prevent some new forms of manipulation to simply circumvent the current regulatory system.

The purpose of this paper was to present the current legal framework related to market manipulation, with a focus on the problem arising when trying to fit such framework to the current system of liability, both administrative and criminal. The current approach, as outlined, might be flawed in preventing AI-based trading market manipulation. The two most vulnerable aspects seem to be the lack of a truly aligned European Union legal framework, together with that of a new liability paradigm, more up-to-date with the current developments of ML technologies.

References

- Annunziata F (2023) Artificial intelligence and market abuse legislation: a European perspective. Edward Elgar Publishing
- Azzutti A (2022) Ai trading and the limits of EU law enforcement in deterring market manipulation. *Comput Law Secur Rev* 45:105690
- Boehmer E, Fong K, Wu JJ (2021) Algorithmic trading and market quality: international evidence. *J Fin Quantitat Anal* 56(8):2659–2688
- Bošković MM, Kostić JŽ (2020) The application of the NE BIS in Idem related to financial offences in the jurisprudence of the European courts. *NBP J Criminal L* 25(2):67–77
- Burrell J (2016) How the machine ‘thinks’: understanding opacity in machine learning algorithms. *Big Data & Society*
- Dellermann D, Ebel P, Söllner M et al (2019) Hybrid intelligence. *Bus Inf Syst Eng* 61(5):637–643
- Dutta S (2018) An overview on the evolution and adoption of deep learning applications used in the industry. *Wiley Interdiscip Rev Data Min Knowled Discov* 8(4):e1257
- Fenwick M, Kaal WA, Vermeulen EP (2016) Regulation tomorrow: what happens when technology is faster than the law. *Am U Bus L Rev* 6:561
- Foy P (2021) Deep reinforcement learning for trading: strategy development & AutoML. <https://medium.com/@Lidinwise/trading-through-reinforcement-learning-using-lstm-neural-networks-6ffb1f5e4a5>
- Johnson N, Zhao G, Hunsader E et al (2013) Abrupt rise of new machine ecology beyond human response time. *Sci Rep* 3(1):2627
- Kirilenko AA, Lo AW (2013) Moore’s law versus Murphy’s law: algorithmic trading and its discontents. *Journal of Economic Perspectives* 27(2):51–72
- Koshiyama A, Firoozye N, Treleven P (2020) Algorithms in future capital markets. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3527511

Viera A (2019) Trading through reinforcement learning using LSTM neural networks. <https://blog.mlq.ai/deep-reinforcement-learning-trading-strategies-automl/>

Andrea Mecchina, B.Sc. in Physics from the University of Trieste in 2019, and M.Sc. in Data Science and Scientific Computing from the University of Trieste in 2021, is currently a Ph.D. candidate in Applied Data Science and Artificial Intelligence at the University of Trieste. His research interests include statistical modeling, time series analysis and unsupervised learning.

Lorenzo Basile, B.Sc. in Automation Engineering from the Federico II University of Naples in 2019, M.Sc. and Ph.D. in Data Science from the University of Trieste in 2021 and 2025, respectively, currently a postdoctoral researcher at the Laboratory of Data Engineering of Area Science Park in Trieste. His research interests include AI interpretability, focusing on explaining and controlling complex models, and multimodal machine learning, integrating vision, language, and other data for richer representations.

Luca Bortolussi, Degree in mathematics in Trieste (2003) and Ph.D. in computer science from the University of Udine (2007), Visiting Researcher at the University of Edinburgh (2012), Associate Researcher at CNR-ISTI Pisa (QUANTICOL FP7 Project, 2013–2017), and Professor at Saarland University (2014–2015, Guest 2016, 2018–2021). At the University of Trieste, he was Assistant/Associate Professor (2006–2021) and is now Full Professor, leading the AI Laboratory. His research spans artificial intelligence, bridging symbolic, formal, and applied methods.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

