



The EU Regulation Problem and How to Fix it With AI by Bellomarini, Blasi, Brandetti, Gentili, Guiso, Magnanimiti and Michelacci

Prof. Fernando Perez-Cruz Bank for International Settlements and ETH Zurich.

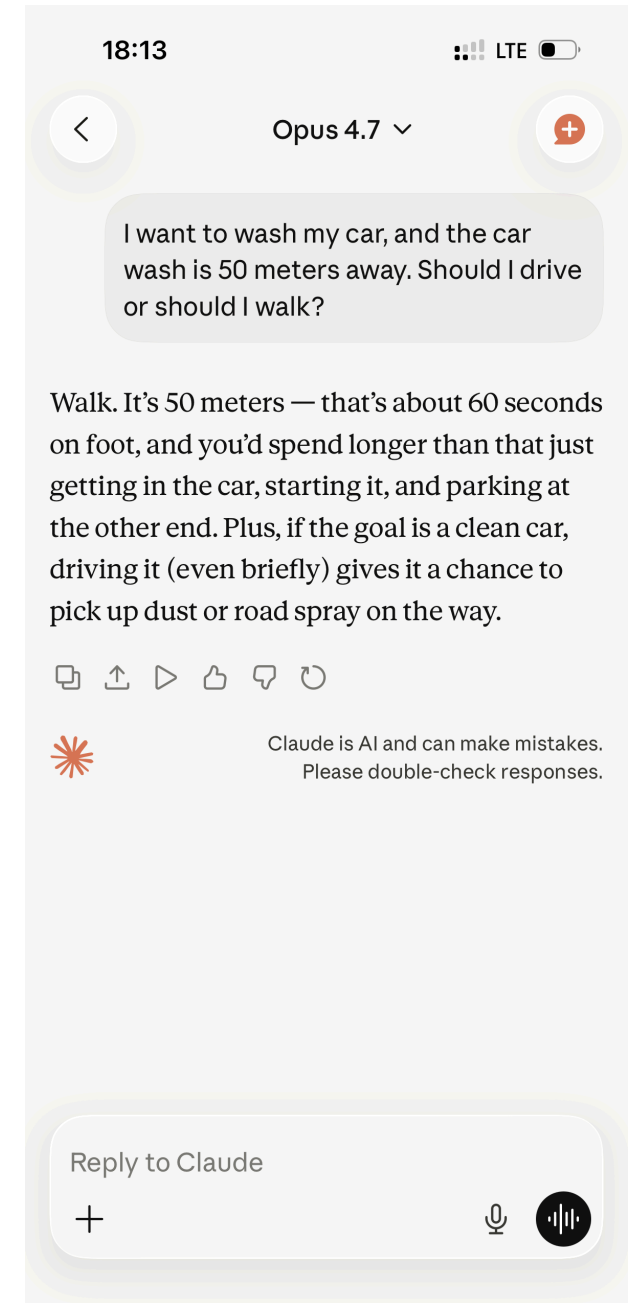
This talk represents my views and not necessarily those of the BIS.

Purpose

- EU legislation is complex and hard to understand (who can disagree?)
- Large Language models provide a way to ingest all this information and generate clear summary statistics about the complexity of the text.
- LLMs can help reduce the complexity and make the text more accessible.
- LLMs can process millions of words instantly (or, more precisely, in zero human time).

Ambiguity and randomness in LLMs

- LLMs do not know whether something is true or false.
- They react to your prompt.
- If something is ambiguous, they do not ask; they act.
- When working with LLMs:
 - The LLM does.
 - We check.
- Ambiguity is a lack of sufficient information or giving contradictory information.
- Furthermore, LLMs are random:
 - Same input, different output.



Prompt 1

You are a highly concise legal summarizer. Produce the shortest possible summary that still allows a competent lawyer, with general legal background but no access to the original text, to reconstruct all obligations, rights, conditions, exclusions, timelines, parties, and defined terms precisely. Avoid redundancy; omit any wording that is not necessary for exact reconstruction of duties and rights.

Summarize the following text to the absolute minimum length while preserving all obligations, rights, conditions, exclusions, timelines, parties, and defined terms so a competent lawyer can reconstruct them precisely: text

Final paragraph Article 4 of Council Regulation (EU) No 1024/2013

Where necessary the ECB shall contribute in any participating role to the development of draft regulatory technical standards or implementing technical standards by EBA in accordance with Regulation (EU) No 1093/2010 or shall draw the attention of EBA to a potential need to submit to the Commission draft standards amending existing regulatory or implementing technical standards.

Where necessary, ECB contributes to EBA draft RTS/ITS or alerts EBA to needed amendments.

GPT5.5T

and must contribute where necessary to EBA draft technical standards or alert EBA to needed amendments.

GPT5.5T

and must participate where necessary in EBA technical-standard development or request amendments

GPT5.5i

Level 1 vs Level 2?

Level 1 legislation sets out the core framework principles and defines essential features. Level 1 includes, for example, the objectives of the regulation; its scope and key definitions; the main rights and obligations; the institutional framework; core choices regarding harmonization between national and European levels; and the delegation clauses empowering the Commission or regulatory agencies to adopt implementing measures. These elements reflect fundamental political choices and are intended to be stable and enduring. Level 2 legislation translates Level 1 principles into operational rules by specifying their technical content and modes of application. Level 2 includes, for example, rules for procedures; specifications of quantitative benchmarks; mechanisms for verifying and enforcing compliance; timelines and reporting frequencies; and standards for ensuring consistent application across jurisdictions. Unlike Level 1, Level 2 is designed to be flexible, allowing for continuous technical adjustments without reopening primary legislation. I have attached a European law. For each article of the law, please separate the provisions that fall under Level 1 from those that fall under Level 2. Please read the text carefully and base your classification strictly on the content of the provisions, not on their length or position. Highlight Level 1 provisions in yellow, highlight Level 2 provisions in light blue, and leave the text unassigned with no highlighting where the classification is uncertain. For each article, calculate the number of words classified as Level 1, Level 2, or unassigned. Report these results as a table at the end of the file, ensuring that the three number of words sum up to those in the law. Include explanations or additional text.

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In one sentence: Level 1 legislation sets the stable, politically-decided framework (objectives, scope, definitions, rights/obligations, institutional setup, delegation clauses), while Level 2 legislation provides the flexible technical implementation (procedures, quantitative benchmarks, compliance mechanisms, timelines, reporting standards) that operationalizes those Level 1 principles.

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CHAPTER III *Powers of the ECB*

Article 9

Supervisory and investigatory powers

1. For the exclusive purpose of carrying out the tasks conferred on it by Articles 4(1), 4(2) and 5(2), the ECB shall be considered, as appropriate, the competent authority or the designated authority in the participating Member States as established by the relevant Union law.

For the same exclusive purpose, the ECB shall have all the powers and obligations set out in this Regulation. It shall also have all the powers and obligations, which competent and designated authorities shall have under the relevant Union law, unless otherwise provided for by this Regulation. In particular, the ECB shall have the powers listed in Sections 1 and 2 of this Chapter.

To the extent necessary to carry out the tasks conferred on it by this Regulation, the ECB may require, by way of instructions, those national authorities to make use of their powers, under and in accordance with the conditions set out in national law, where this Regulation does not confer such powers on the ECB. Those national authorities shall fully inform the ECB about the exercise of those powers.

2. The ECB shall exercise the powers referred to in paragraph 1 of this Article in accordance with the acts referred to in the first subparagraph of Article 4(3). In the exercise of their respective supervisory and investigatory powers, the ECB and national competent authorities shall cooperate closely.

3. By derogation from paragraph 1 of this Article, with regard to credit institutions established in participating Member States whose currency is not the euro, the ECB shall exercise its powers in accordance with Article 7.

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Summary

- This is a general criticism of people putting too much faith in the power of LLMs.
- Checking becomes vital.
- It is not that LLMs make mistakes:
 - We are ambiguous and leave key information unsaid.
 - We are repetitive and contradictory in our statements.
- If a prompt can be misinterpreted, it will be misinterpreted.
- Instead of using AI to fix the laws that we have already passed.
- AI might be better as a tool to understand what the law says.



