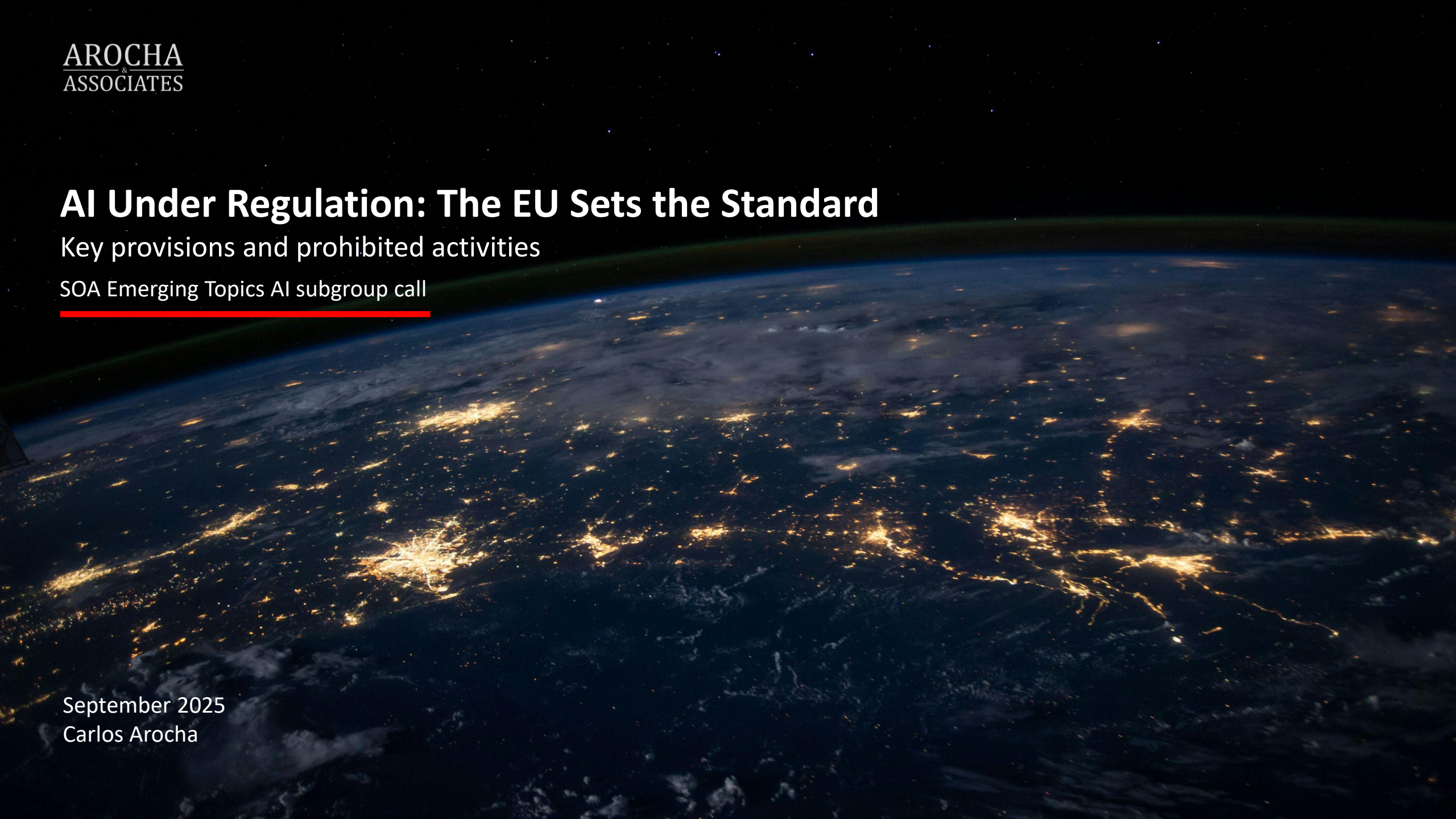
AROCHA & ASSOCIATES

AI Under Regulation: The EU Sets the Standard

Key provisions and prohibited activities

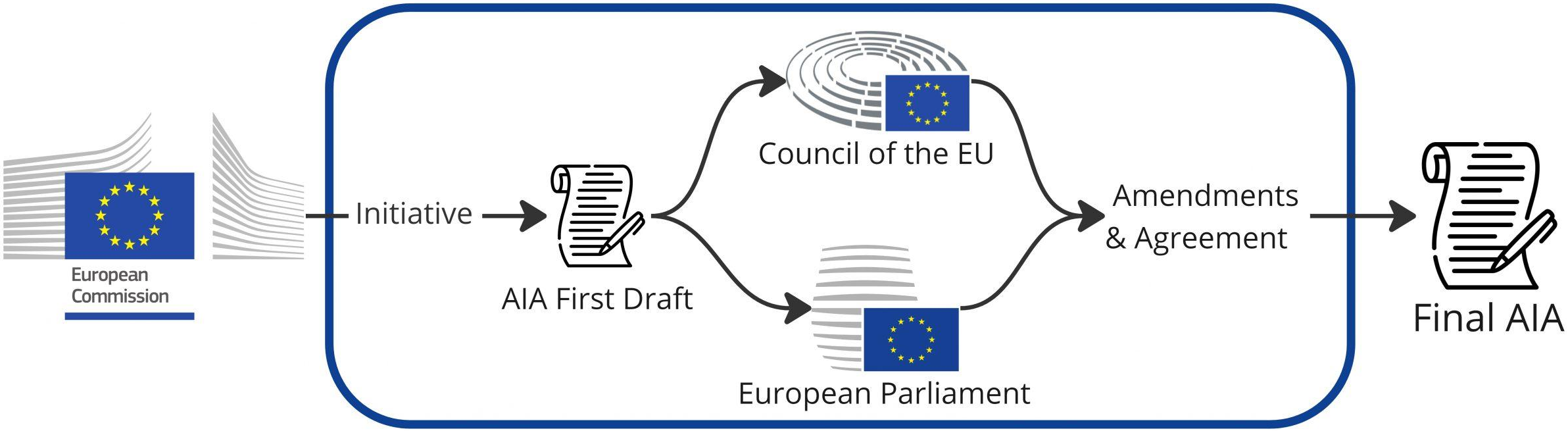
SOA Emerging Topics AI subgroup call



September 2025

Carlos Arocha

EU‘s Ordinary Legislative Procedure



AI risk levels range from minimal to unacceptable.



GPAI Compliance Framework



Technical Documentation

Providers must offer comprehensive technical guides and instructions.



Open License Compliance

Providers with free licenses need to adhere to copyright and data transparency.



Systemic Risk Management

Providers of high-risk models must conduct thorough evaluations and testing.



Cybersecurity Protection

All providers must ensure robust cybersecurity measures.

Prohibited AI Systems

- deploying subliminal, manipulative, or deceptive techniques to distort behavior
- exploiting vulnerabilities related to age, disability, or socio-economic circumstances
- social scoring
- assessing the risk of an individual committing criminal offenses solely based on profiling
- compiling facial recognition databases by untargeted scraping of facial images
- inferring emotions in workplaces or educational institutions (w/ exceptions)
- biometric categorization systems inferring sensitive attributes, except labelling or filtering of lawfully acquired biometric datasets
- remote biometric identification (RBI) in publicly accessible spaces for law enforcement (w/ exceptions)

Leveraging Large Language Models for Effective Excel Model Building



Effective Prompting Strategies for LLMs

Clear problem definition

- Purpose
- Audience
- Contents (inputs, logic, outputs)
- How (style, interface)

Step by step

- Interact with LLM step by step

Seek feedback

- Let LLM ask for clarity and advice

Case study

Clear problem definition

- Purpose
- Audience
- Contents (inputs, logic, outputs)
- How

Step by step

- Interact with LLM step by step

Seek feedback

- Let LLM ask for clarity and advice

	Case study prompt
Purpose	Build an Excel workbook, generating equity scenarios (SPX, NASDAQ, Russell 2000).
Audience	This is for actuarial educational purposes.
Contents	The workbook analyzes historical volatility and correlation of the indices. Use Geometric Brownian Motion: Generate correlated pseudo-random numbers and produce index price returns. Quarterly time step for 30 years. 2 scenarios and consider expandability. Include a tab to document the model workflow and mathematical concepts.
How	The workbook should use best practices, be easy to read, and be auditable.
Step by step	Provide detailed steps. The first step should be creating a plan. Pause at each step so that I can review, validate, and provide feedback while I build the workbook.
Seek feedback	Provide any recommendations to help with my purposes. Ask me questions if anything is unclear.

Conclusion



Boosting Efficiency and Quality

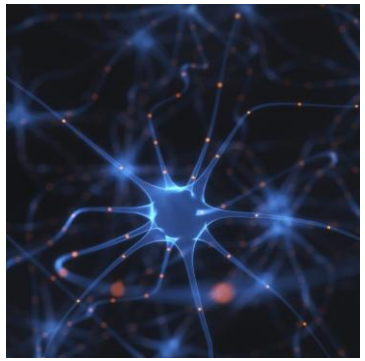
LLMs significantly improve complex model-building efficiency, quality, and documentation.



Clarifying Problem Definitions

Clear business problem definition is key to effective use of LLMs.

LLMs help users define complex problems clearly by providing feedback and seeking for clarification.



Learning tool

LLMs facilitate understanding concepts/logics and provide clear explanations.

LLMs can offer insights into how complex topics can be explained.