


AI assistant for contract review under DORA regulation

 **80% reduction**
in manual effort

 **70% increase in**
processing speed

 **90-95%**
accuracy rate

Project summary

Streamlined end-to-end contract review by automating clause detection and compliance checks.

Converted non-readable documents into searchable text using advanced OCR technology.

Accurately detected, classified, and compared critical clauses and provisions to ensure alignment with DORA standards.

Automatically extracted key contract provisions for the Register of Information (ROI).

Proposed addenda for renegotiations with ICT third-party service providers.

Business needs

Berenberg, one of the oldest and one of Europe's leading privately owned banks, sought a faster and more reliable way to review its ICT third-party service provider contracts against the **requirements of the Digital Operational Resilience Act (DORA)**. With DORA compliance becoming mandatory by January 2025, Berenberg needed a solution that would:

➤ **Automate contract reviews:** Replace slow, costly, and error-prone manual processes with a faster AI-based approach.

➤ **Ensure DORA alignment:** Systematically identify discrepancies between contract terms and a DORA-compliant model.

➤ **Reduce costs and errors:** Minimise manual review time while improving accuracy.

➤ **Support the Register of Information (ROI):** Extract key parameters for building and maintaining the DORA-mandated Register of Information.

➤ **Accelerate contract renegotiations** with ICT service providers by generating addenda proposals, ensuring faster agreement on standard and custom clauses.

Challenges

An AI solution was needed to enable fast, automatic, and reliable verification of **hundreds of ICT contracts**. However, achieving this required overcoming several **key challenges**:

- > **Complex contracts:** IT and outsourcing agreements often contain specialised or ambiguous language.
- > **Time constraints:** Legal teams were spending excessive hours on manual reviews, driving up costs and delaying decision-making.
- > **Risk of non-compliance:** Missing or misclassified clauses could lead to non-compliance with DORA, exposing the bank to regulatory actions.
- > **Multiple addenda:** Contracts often include separate addenda, further increasing complexity.

Tech stack

Azure, GPT4, Angular, Typescript, Spring Boot, Python, Helm Charts

Solution & results

By rapidly analysing Word, PDF, or scanned documents, the system completes reviews within minutes—driving a **70% improvement in processing speed**. Moreover, **80% of manual effort has been eliminated**, allowing legal and procurement teams to focus on higher-value tasks.

During validation, Berenberg's team confirmed a **90–95% accuracy rate** in identifying and comparing relevant clauses, ensuring consistent and reliable reviews.

To meet DORA's requirements for transparency, relevant contract parameters are **automatically extracted** for the mandated Register of Information (ROI), **streamlining ongoing compliance and reporting processes**.

By automatically generating addenda, the system **reduced negotiation timelines** with ICT contract partners **from 2–3 weeks to minutes**.

The AI-driven contract review is supported by an **intuitive user interface** and a clear, systematic presentation of results, enabling both the legal and procurement departments to efficiently assess contracts.

“The AI assistant for contract review has significantly accelerated our approach to DORA compliance. Its automated clause-by-clause analysis quickly identifies discrepancies, suggests relevant amendments, automatically generates addenda for renegotiation with our ICT third-party service providers and extracts relevant contract data for reporting to the information register—all with remarkable accuracy. By reducing manual effort by 80%, we have significantly reduced both, our costs and resource bottlenecks, allowing our team to focus on higher value tasks.”

Alexander Martens

Procurement / Provider Management at Berenberg



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