

Group 37: Alexander Welsh, Cassandra Åstenius, Euan McBride, Jacob Grimhall, Janina Müller, Lilas Treguenard

This appendix documents the approach taken by Team 37 in 2025 to develop the Dynamic AI Value-Chain Framework (DAVF) as a policy response to the EU's challenge of reconciling safety, rights protection, and technological competitiveness in artificial intelligence. It outlines how the group organised its work, the analytical steps undertaken, and the methods used to address conceptual, empirical, and coordination challenges throughout the project. The appendix also summaries key data sources, definitions, and illustrative examples that informed the analysis, and it presents the feasibility considerations that guided the formulation of our final policy proposal. Find the full reference list of sources used at the bottom of this document.

## I. Working Culture

Our team of six operated within a highly collaborative and adaptive working culture characterised by several key elements:

**Collaborative and open communication:** We maintained open dialogue throughout the project, freely sharing perspectives and challenging assumptions in a constructive manner.

**Flexibility with focus:** We cultivated a relaxed yet purposeful atmosphere. Workload distribution respected each member's university and professional commitments, ensuring fair contribution. However, this flexibility was balanced with discipline: we established clear objectives at regular intervals and systematically reviewed our progress to maintain momentum

**Receptiveness to feedback:** the team culture encouraged constructive criticism and iterative refinement. We actively sought and incorporated feedback from our teammates and supervisor.

**Complementary expertise:** We actively exploited on our diverse academic and professional backgrounds: Alex (Bocconi), with venture capital experience, brought crucial insights into innovation dynamics and market competitiveness, helping us understand how regulatory burdens affect startup ecosystems and investment flows; SSE students (Cassandra, Jacob & Janina) contributed implementation-oriented perspectives, particularly regarding public sector capacity and practical regulatory enforcement; Euan (LSE) provided expertise in public policy and public sector procurement, offering insights into how governments acquire and deploy AI systems; Lilas (LSE) contributed knowledge of the political economy of EU policymaking, ensuring our proposals were grounded in the institutional realities and political dynamics of Brussels.

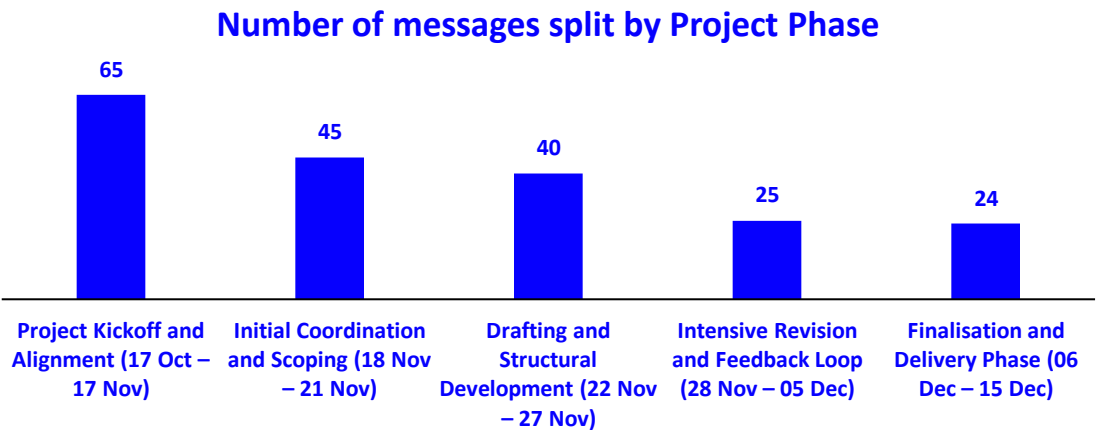
This culture of structured collaboration and mutual respect enabled us to bridge different disciplinary perspectives and develop a comprehensive policy approach that addresses both innovation imperatives and security concerns.

## II. Working Methodology

### Communication

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Our group coordinated primarily through a shared WhatsApp group. Initially, in the project, we conducted video meetings (in Zoom and Google Meets) to coordinate and to ensure everyone understood the bigger picture and that we created a personal connection and got to know each other, putting a face on all group members. Hence, we conducted an intro meeting with the group, then a meeting after our initial feedback meeting with our supervisor. After that, we realised that video meetings with all members were a bit inefficient, even though brainstorming and preparatory work had been conducted. Thus, after getting started with writing, we relied on text messages (including pictures etc.) in the WhatsApp group chat for more direct communication. In total, around 200 messages were sent in our group chat up until December 15th of various lengths (only main group chat, not including individual chat(s)). Below is a graph of the development of messages sent in the WhatsApp group. Additionally, upon dividing the work, separate chats between individual members were also used in order to avoid message overload in the main group chat, and ensure that the respective group members could get into detail. A summary or briefing of what had been written separately was always sent in the main group to ensure that everyone was on board, but in a more condensed version.



For clearer and direct comments and communication in relation to formulations, we relied on the comment feature in Google Docs. I.e., creating comments and using the reply thread to ensure that the comments were clearly tied to the text/formulation at hand and not getting lost in a WhatsApp group. Hence, Google Drive was the space of text and writing collaboration, as it allowed for edits in real-time and much more smoothly, compared to the office equivalent (more crashes etc.)

**Research Approach and Initial Structuring**

At the outset of our project, we structured our research by dividing between two thematic angles, innovation and safety, to familiarise ourselves with the regulatory landscape and identify the main shortcomings of the EU’s current approach. Each team member conducted independent research and shared the most important shortcomings they had identified. On this basis, we were then able to jointly determine the focus for our paper that we felt was most promising. Early drafts were then

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consolidated in Google Docs, where we iteratively refined the structure of the paper and incorporated emerging insights.

### **Challenges and How We Addressed Them**

Throughout the project, we encountered several methodological challenges that shaped the way we organised our work. The most significant difficulty arose from differing schedules and time zones, which made synchronous collaboration challenging and required most of the research and drafting to progress independently before being merged. This sometimes resulted in overlapping arguments or inconsistencies in style and structure. We addressed this challenge through a flexible and informal division of work, relying on individual initiative rather than strict task assignments. Team members reviewed and improved sections whenever they had time, which kept the project moving forward but required later harmonisation to ensure consistency. Another challenge concerned the breadth of the topic itself. Our initial ambition to cover multiple dimensions of the EU AI Act quickly proved too expansive, and we had to repeatedly narrow and refocus the analysis to avoid producing a descriptive paper rather than a policy-oriented one. In order to achieve this narrower scope, several rounds of proofreading by various group members and rewordings were necessary.

### **Incorporating Feedback into the Methodology**

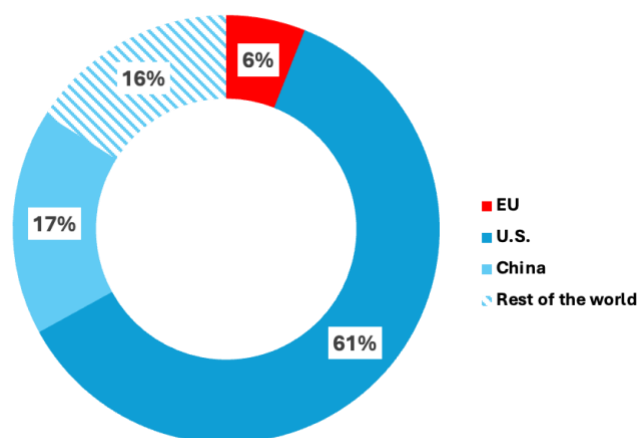
The methodological progression of the paper was strongly guided by the regular feedback cycles with our supervisor. During the mid-term meeting, the need to narrow the scope and avoid overly descriptive background sections was highlighted, which prompted us to refocus the policy paper on a small set of clearly defined problem areas. As the project evolved, subsequent rounds of written feedback clarified methodological distinctions such as the difference between testing and procurement, the importance of addressing visibility issues in upstream compliance and the need to restructure our proposal so that the value proposition appears at the forefront. These insights required several structural revisions, including merging overlapping implementation steps, simplifying the original seven-step plan, and strengthening the conceptual logic of the Dynamic AI Value Chain Framework. These feedback loops not only improved the clarity and feasibility of our proposal, but also significantly influenced the methodological discipline of the project, requiring us to justify causal mechanisms, foreground incentives and articulate our recommendations with greater precision.

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## Annex I - AI market metrics

**AI Market growth:** The AI market is projected to grow 25x over the next 8 years, equalling a CAGR of ~50%, as it will reach a value of USD 4.8tn in 2033 (UNCTAD, 2025: 6). This growth is driven by accelerating investments in models, sector-specific applications, and AI-enabled productivity tools across several sectors/industries. Importantly, the growth is expected to be prominent in jurisdictions with fast, predictable regulatory environments and access to high-quality data and computing power.

### Global AI start-up funding share



The distribution of global AI start-up funding reveals a stark imbalance: the EU captures only 6% of worldwide investment, compared to China and the U.S. capturing 16% and 17%, respectively. (Draghi, 2025: 29).

**Public Datasets:** Healthcare, social security, and education.

### EU27 2023 spend (NON AI DATA)

Healthcare spending averaged 14.8% of government expenditure ([EU Commission, 2025a](#)), social services 39.3% ([EU Commission, 2025b](#)), and education 9.6% ([EU Commission, 2025c](#)).

**Public Procurement (% of GDP) in the EU:** ~14% ([OECD, 2025](#))

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## Annex II - Definitions

### *Terminology definitions*

**Third-country:** Refers to non-EU (EU terminology)

**High-risk AI:** applications where an AI system functions as a safety component in a product, is a product itself, or is deployed in one of the eight sectors listed (AI Act, Annex III).

**Human-Centric Systems:** Systems that safeguard health, safety, and fundamental rights

**Blanket Restrictions:** Refers to uniform regulatory obligations applied across all actors within a given category, such as high-risk deployers, without differentiation based on their role, context, size, or risk-control capacity.

**Secondary Data (Secondary use):** Data used for any purpose other than that for which it was originally collected. Context: EHDS [34\(1\)\(g\)](#) allows state oversight bodies to approve access to de-identified *secondary data*, i.e. data used for any purpose other than that for which it was originally collected, for the training of AI systems without the subject's consent, but EHDS [3\(9\)](#) upholds the subject's right to withhold access. In practice, member states' interpretations of the EDHS may still restrict real-world tests and procurement pilots, depending on the speed and complexity of the permitting processes and on how the subject's right to withhold access is maintained.

**High-risk industries (own definition):** *Refers to sectors where advanced AI materially impacts health, safety, fundamental rights, or critical infrastructure. While inspired by the AI Act's high-risk domains, this definition is broader and more operational. Full list of included industries below:*

1. **Critical Infrastructure:** Energy, transportation, water systems, digital infrastructure, emergency and disaster response
2. **Health and Biomedical Systems:** Healthcare, medical technology, pharmaceuticals and biotechnology, public health, social care systems
3. **Finance, Economic Stability and Security:** Banking, insurance, financial market infrastructure, payment systems, AML, and compliance systems
4. **Education, Labour and Human Capital Systems:** Education, skills and training, labour market services, recruitment, workplace management
5. **Justice, Governance and Public Administration:** Law enforcement, criminal justice, border management and customs, taxation, public benefits administration
6. **Industrial and High-Value Production Systems:** Advanced manufacturing, robotics, chemicals, automotive, aerospace, supply chain, and logistics
7. **Environmental Management and Climate Critical Sectors:** Environmental monitoring, climate modelling, agriculture and food systems, resource extraction, waste management

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## Annex III - DAVF framework

*Describes and elaborates on the DAVF framework*

### DAVF overview

| Layers                                      | Actors                                                                                                                                                                                                                                                                                                                                                              |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Model Deployment</b>                     | <p><i>Actors that generate, curate, and process data and provide compute infrastructure that shapes model capabilities before development begins.</i></p> <ol style="list-style-type: none"> <li>I. Data Originators</li> <li>II. Data Curators and Pre-Processors</li> <li>III. Compute &amp; Infrastructure Providers</li> </ol>                                  |
| <b>Upstream Knowledge &amp; compute</b>     | <p><i>Actors that build, pre-train, and fine-tune models, creating both foundation models and domain-specific systems.</i></p> <ol style="list-style-type: none"> <li>I. Foundation Model Developers</li> <li>II. Model Adaptors/Domain Integrators</li> </ol>                                                                                                      |
| <b>System Integration &amp; Deployment</b>  | <p><i>Actors that assemble AI systems, integrate them into real environments, and deploy them across public and private sectors.</i></p> <ol style="list-style-type: none"> <li>I. Solution Assemblers / System Integrators</li> <li>II. Public Deployers</li> <li>III. Private Deployers</li> </ol>                                                                |
| <b>Oversight, Assurance &amp; Testing</b>   | <p><i>Independent bodies that test, certify, audit, and supervise AI systems across the entire value chain.</i></p> <ol style="list-style-type: none"> <li>I. Accredited Test Labs &amp; Conformity Assessment Bodies</li> <li>II. Regulatory Sandboxes &amp; Public AI Testing Environments</li> <li>III. Independent Auditors</li> </ol>                          |
| <b>Governance &amp; Accountability</b>      | <p><i>EU and national authorities that coordinate enforcement, set standards, and ensure proportional, rights-preserving regulation.</i></p> <ol style="list-style-type: none"> <li>I. Accredited Test Labs &amp; Conformity Assessment Bodies</li> <li>II. Regulatory Sandboxes &amp; Public AI Testing Environments</li> <li>III. Independent Auditors</li> </ol> |
| <b>End-Users &amp; Impacted Communities</b> | <p><i>Individuals and organisations who interact with AI systems and experience their outcomes, exercising rights and providing feedback.</i></p> <ol style="list-style-type: none"> <li>I. End-Users</li> <li>II. Impacted Individuals and communities:</li> </ol>                                                                                                 |

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The following section outlines the proposed classification of actors within the Dynamic AI Value Chain Framework (DAVF). For each actor group, we present a structured description consisting of: (1) the actor category, (2) its core tasks, and (3) its corresponding responsibilities.

### 1. Upstream Knowledge and Compute Layer

#### Data Originators:

**Tasks:** generate primary data (public institutions, research infrastructures, clinical data holders, private datasets).

**Responsibilities:** data quality, metadata standards

#### Data Curators and Pre-Processors:

**Tasks:** clean, label, structure, or augment data.

**Responsibilities:** data governance, documentation

#### Computing and Infrastructure Providers:

**Tasks:** supply computing power for model training, fine tuning, and evaluation. Operate cloud infrastructure

**Responsibilities:** secure environments, logging, access controls, and compute transparency (who trains what and under what conditions).

### 2. Model Development (Foundation & Domain-Specific)

#### Foundation Model Developers

**Tasks:** pre train large scale models, implement and ensure safety features, and document model behaviour.

**Responsibilities:** safety-by-design, model cards, and reporting systemic, and material/and emergent risks

#### Model Adaptors / Domain Integrators (often high-risk developers)

**Tasks:** tune foundation models for sectoral/usage in specific industrials (health, transport, finance), and integrate domain-specific datasets and safety barriers/

**Responsibilities:** domain-risk assessments, testing of sectoral/industry performance, and documentation of traceability.

### 3. System Integration & Deployment Layer

#### System Integrators

**Tasks:** embed models into applications, APIs/integration, device integration, workflows, design, visuals, and UX, and human oversight mechanisms

**Responsibilities:** assessment of system-level risk, testing of robustness and cybersecurity

#### Public Deployers (*key sectors are high-risk industries as mentioned above, hospitals, agencies, courts, municipalities etc.*)

**Tasks:** deployment in sensitive/high-risk contexts, running pilot programmes, and supervising the high-risk systems mentioned above.

**Responsibilities:** monitor real-world, oversight, or real-world testing, compliance of procurement practices, and reporting of evidence obtained

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**Compute and Infrastructure Providers:**

**Tasks:** integrate AI into products and services, while ensuring ongoing compliance with DAVF.

**Responsibilities:** safeguard uses, monitoring of post-market, reporting of incidents, and red flags

**4. Oversight, Assurance, and Testing layer****Accredited Testing Labs and Conformity Assessment Bodies:**

**Tasks:** to evaluate model/system safety, certify compliance behaviour, and stress test high-risk uses/sectors (deployment or testing of AI in aforementioned high-risk sectors).

**Responsibilities:** independent verification, ensure implementation of harmonised standards

**Regulatory Sandboxes and Public AI Testing Environments:**

**Tasks:** facilitate supervised real-world testing, scanning horizon and pipeline development, facilitate experimentation and scale-up, provide relevant facilities

**Responsibilities:** issuance of testing permits, support SMEs in development, provide exit opportunities and guidance

**5. Governance and Accountability Layer****EU-level Bodies (AI office):**

**Tasks:** coordinate standards, enforce cross-border compliance in the EU and in member states, and monitor systemic risks that emerge from usage. Combine AI data with national data. Engagement of academic institutions.

**Responsibilities:** reclassification of risks within the dynamic behaviour, issuance of guidelines, and coordination of oversight bodies. Coordinate a common response to extra-EU threats and demands.

**National Competent Authorities:**

**Tasks:** implementation on a national level, inspections of the AI actors, enforcement of regulations on the national level, and collection of data (in line with GDPR and other acts)

**Responsibilities:** incident response, market surveillance, and sanctions.

**Ethics Committees and Civil Society Observers:**

**Tasks:** evaluate fundamental rights impacts.

**Responsibilities:** ensure the legitimacy of development and human-centric, accountability to the public, rights-preserving governance, and transparency compliance

**6. End-Users and Impacted Communities****End-Users:**

**Tasks:** usage of systems, provide feedback after usage, exercise rights

**Responsibilities:** the usage of AI ethically and responsibly. Held accountable to the laws and regulations

**Impacted individuals and Communities:**

**Tasks:** downstream effects, benefits, and risks.



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*Responsibilities: none imposed, rights-holders only.*

#### DAVF non-linear relationship



The DAVF creates a new classification system of the current AI Value Chain in the EU AI Act, by replacing the AI Act's linear provider-deployer relationship with an ecosystem-based model. The concentric illustration makes this shift explicit. Instead of defining it as isolated or sequential steps/stages, the actor(s) in DAVF overlap through interaction and continuously influence one another through data sharing, commercialisation interests, shared end users, supplier overlaps, and compliance mechanisms. It is laid out as follows: upstream data and compute actors feed into the model development, which shapes the system integration and deployment. This occurs while oversight and governance operate across all the layers/concentric circles and provide feedback towards the centre (i.e., the model deployment). The DAVF, hence, captures the non-linear nature of modern AI development, where risks, responsibilities, and innovation circulate dynamically across the value chain, rather than flowing in a single direction.

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## Annex IV - Examples

### Descriptive examples

**Sandbox retention incentive mechanisms:** *To ensure that firms participating in DAVF testing pathways continue to scale and commercialise their AI systems within the European Union, the following retention incentives can be introduced*

| Sand box retention Incentive                                                                                                                                                                                                                                                         | Relevance                                                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>Priority Access to Public Procurement:</b> Firms that complete DAVF sandboxes to receive preferential or fast-track in relevant EU public-sector tenders                                                                                                                          |    |
| <b>Eligibility for EU Scale-Up Financing:</b> Eligibility for dedicated EU funding instruments is conditional on scaling operations remaining within the Union. Link successful sandbox validation to preferential access to EU funding streams (e.g., InvestEU and Horizon Europe). |    |
| <b>Fast-Track Conformity Assessment:</b> Systems that are validated qualify for accelerated assessments of conformity, which reduces time-to-market                                                                                                                                  |   |
| <b>EU-Wide Recognition of Testing Results:</b> Outcomes of Sandbox testing are recognised and standardised across all Member States, which eliminates redundant national re-testing and re-compliance                                                                                |  |
| <b>Preferential Access to the European Commons:</b> EU-based scaling unlocks enhanced use of harmonised datasets and public-sector data partnerships.                                                                                                                                |  |
| <b>Compute Credits and Infrastructure Support:</b> Graduating firms gain priority access to EU compute, cloud credits, or trusted data environments.                                                                                                                                 |  |
| <b>Reduced Administrative Burden for EU-Based Operations:</b> Firms scaling in the EU benefit from streamlined documentation and harmonised audit requirements.                                                                                                                      |  |

**Relevance:** *defined as a subjective assessment of expected importance and behavioural impact (see illustration explanations below)*



Highly Relevant, High Expected Impact



Moderately High Relevance, Meaningful Expected Impact



Moderate Relevance, Targeted Expected Impact



Limited Relevance, Supportive Expected Impact

**Tier-2 Sub-Provider Incentives:** *Incentives for Tier-2 upstream actors to participate in DAVF-aligned practices, and its respective relevance.*

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| Tier-2 Incentive                                                                                                                                                                                                                                                                                        | Relevance                                                                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| <b>Contractual Market Access and Preferred Supplier Status:</b> Designation as an approved partner in EU procurement-linked supply chains, for example, being listed as a “trusted technical contributor” or meeting required transparency standards for integration into high-risk system development. |   |
| <b>Eligibility for EU Data, Compute and Testing Partnerships:</b> Access to EU-supported datasets, secure data environments, compute credits, or shared testing infrastructure such as the European AI Testing Facilities or cross-border trusted cloud environments.                                   |   |
| <b>Faster Integration into EU Sandboxes:</b> Accelerated admission into supervised testing pathways, including priority placement in cross-border AI sandboxes or earlier eligibility for participation in public-sector pilot environments.                                                            |   |
| <b>Reduced Documentation Burden &amp; Standardised Templates:</b> Use of harmonised documentation templates, simplified reporting forms, and pre-approved technical checklists to demonstrate baseline transparency and interoperability.                                                               |  |

**Relevance:** defined as a subjective assessment of expected importance and behavioural impact (see illustration explanations below)

-  Highly Relevant, High Expected Impact
-  Moderately High Relevance, Meaningful Expected Impact
-  Moderate Relevance, Targeted Expected Impact
-  Limited Relevance, Supportive Expected Impact

**Potential Future Extensions of the DAVF:** This outlines a set of optional extensions that could be implemented if the DAVF proves effective in its initial phase. These measures are designed to strengthen the framework’s long-term impact, improve regulatory coherence, and address structural gaps in the EU’s AI ecosystem.

- Annual AI Innovation and Risk Outlook:** AVCA to provide a systematic assessment of emerging risks, technological trends, and sectoral opportunities and a general AI assessment on an annual basis.
- Progressive Integration into an AI Single Market:** Consolidates regulatory and market rules as the DAVF matures. With mutual recognition of testing and conformity assessments, harmonised procurement criteria for AI systems, and interoperable compliance processes and documentation.
- Establishment of a European Dataset Commons:** Addresses persistent shortages of high-quality, accessible datasets for training and evaluation. To include curated and standardised

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public-sector datasets. Further controlled mechanisms regarding access to ensure privacy and security, and sector-specific data pools are up to date and beneficial to the AI ecosystem's actors.

- 4.
5. **Creation of an EU AI Sovereignty Fund:** If monetary restrictions are not an issue, this provides long-term capital capacity and avoids dry powder, as it focuses on AI more clearly. To be structured as a public-private investment vehicle, building on the DAVF Scale-Up facility. To support firms from early development until deployment. Would over time focus more on large-scale AI systems that require larger investments.

**Technological-triggers:** *Regulatory triggers that justify review and recalibration of rules.*

**1. Model Capability and Performance Triggers**

- Emergence of qualitatively new general-purpose capabilities (e.g., multimodal reasoning exceeding defined thresholds).
- Demonstrated capability leaps measured through standardised EU benchmarks (e.g., safety, robustness, explainability).
- Increased autonomy or decision-making ability beyond previously classified risk levels.

**2. Compute, Scale and Training Triggers**

- Training runs exceeding pre-defined compute thresholds (e.g., surpassing X FLOPs).
- Shifts in architecture that materially alter safety, interpretability, or scaling behaviour.
- Availability of new compute-efficient training methods that materially reduce barriers to model development.

**3. Deployment and Impact Triggers**

- Deployment of a model category in a new high-risk or safety-critical sector.
- Significant deviation between expected and real-world model performance based on sandbox or post-market monitoring evidence.
- Detection of systemic safety incidents or unacceptable harm patterns reported through EU post-market surveillance.

**4. Data and Evaluation Triggers**

- New classes of datasets are becoming available that materially alter training dynamics (e.g., real-time health or mobility data).
- Discovery of persistent bias, discrimination, or failure modes across Member States.
- Introduction of new evaluation standards or red-team methodologies that reveal new kinds of risks.

**5. Geopolitical and Market Triggers**

- Major regulatory changes in the US or China that shift global competitiveness thresholds.
- Concentration risks: emergence of systemic dependencies on a single foundation-model provider.

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- Security-related triggers such as models enabling new cyber-offence capabilities.

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Annex V: Feasibility analysis of DAVF

The DAVF is designed as an incremental adjustment to the AI Act’s existing architecture, not a replacement and can realistically be adopted to overcome the EU’s rigid traits for the following feasibilities:

| Feasibility Dimension | Rating                                                                              | Key Takeaway                                                             |
|-----------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| Legal                 |    | Easily integrated through existing legal instruments and delegated acts  |
| Administrative        |    | Requires capacity-building, but AVCO ensures manageable implementation   |
| Political             |    | Politically viable with value-based framing and stakeholder alignment    |
| Economic              |   | Short-term costs offset by long-term innovation, trust, and capital flow |
| Technological         |  | Existing tools can be scaled and coordinated across Member States        |
| Social                |  | Popular with the public; SMEs need tailored support                      |

The following colour-based categorisation indicates the assessed feasibility of implementation for each factor.

 High Feasibility

 Moderate Feasibility

 Low Feasibility

Below follows more extensive elaboration on each aspect’s feasibility.

**Legal feasibility:** DAVF is highly feasible. It does not require a wholesale revision of the AI Act as it can be implemented incrementally through delegated acts, amendments, and existing legislative instruments. The EU already applies risk-based obligations and layered responsibility models in laws such as the Digital Services Act (DSA) and the GDPR. Elements like proportional responsibility, sandboxing, and upstream due diligence are legally precedented and operationally similar to such. Moreover, extending AI-related obligations into supply chains can be pursued by modifying the

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Corporate Sustainability Due Diligence Directive (CSDDD), making DAVF fully compatible with the current legal ecosystem without necessitating treaty changes.

**Administrative feasibility:** The DAVF raises the administrative burden in the short term as new obligations, actor classification, upstream compliance mechanisms, and structured sandbox validation require additional capacity in both EU- and member-state administrations. Establishing the AI Value-Chain Office (AVCO) within DG Connect introduces immediate bureaucratic friction and costs, from staffing costs to new coordination layers. However, these upfront costs are required to enable longer-term efficiency gains, such as a large upfront investment. Much of the necessary foundation in terms of infrastructure already exists, or is under development. The foundation, instead of a blank canvas, is provided through data-governance structures in the EHDS, conformity assessment protocols currently under the AI Act, and member state testing environments. Oversight centralisation allows AVCO to reduce duplication of national assessments, aligns enforcement across the bloc, and overall lowers the aggregate compliance costs over time (the initial cost increases, but the overall costs through time and the bottom line profit will significantly increase through this increase in innovation). To limit the administrative burden, a phased rollout will be deployed, starting with pilot deployment in the high-impact sectors listed. This allows institutions to converge on shared practices before the DAVF goes into full effect/scale.

**Political feasibility:** DAVF adheres directly to Europe's standing ambition to be a global standard-setter for ethical, trustworthy technology. Hence, it aligns well with the EU's core principles: human-centricity, strategic autonomy, and digital sovereignty. From an ideological perspective, it provides political legitimacy across the entire spectrum. Resistance may emerge from member states that become wary of regulatory complexity, increased costs, and burdensome bureaucracy. This is to be mitigated through framing of DAVF as an innovation catalyst that is to grow the economy, rather than a regulatory burden. As in most business cases, a great upfront investment is needed to generate substantial future returns. Smaller member states benefit from harmonised support, while larger ones gain clarity and leverage over global AI dynamics. The case for coordinated competitiveness is one that resonates widely.

**Economical feasibility:** DAVF requires upfront investment, but offers substantial long-term returns. For firms, costs may include internal compliance reviews, participation in sandbox environments, and upstream documentation processes. For regulators, resources will be needed to support AVCO, training, and cross-border coordination. Still, the profits outweigh the costs. A dynamic regulatory environment reduces late-stage compliance failures, accelerates investment decisions by reducing uncertainty, and improves the EU's global appeal for AI capital and talent. Moreover, procurement pilots and preferential access to funding mechanisms (e.g., Horizon Europe, InvestEU) create strong economic incentives for compliant innovation.

**Technological feasibility:** The DAVF is ready for deployment as most of the technical tools, sandbox testing protocols, model documentation frameworks, AI audit procedures, already exist or are being

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developed under OECD, ISO, and other EU digital initiatives. Real-world testing environments have already been trialed in member states, and many AI providers operate using MLOps systems that can be extended to support compliance monitoring. AVCO's would harmonise, scale, and operationalise these tools, not build them from scratch. Additionally, supply chain transparency can be supported by expanding model cards, provenance chains, and traceability frameworks already gaining traction in the AI industry.

**Social feasibility:** DAVF aligns with public expectations and regarding AI. It provides (1) safety, fairness, and accountability, which ultimately strengthen the EU's democratic and ethical credentials. Ultimately, this funnels down and adheres as a solution to the fear of the public: that AI will undermine their personal safety. Additionally, the DAVF provides innovation and by such improves the daily life of EU citizens through digitalisation and a growing economy. The main challenge lies in ensuring that small and medium-sized enterprises are not disproportionately burdened by costs and testing requirements. Overall, the strong obligations and transparency embedded in the DAVF align well with the social preference for a risk-based mindset.

**Overall:** In summary, the DAVF is a legally grounded, economically justified, administratively manageable, and politically timely policy package. While it introduces new obligations, these are offset by long-term efficiency, trust, and competitiveness gains. DAVF builds on existing EU institutions and legal mechanisms and thus represents not a rupture, but an evolution. This allows the EU to move from a reactive regulatory stance to a proactive technology-shaping strategy. With coordinated implementation, it offers a high-value path to bringing the new Digital Epoch to life for the EU.



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