

Designing AI rules that unleash startups: Open Letter from startup communities on the AI White Paper

Artificial Intelligence legislation should be designed hand in hand with startup entrepreneurs to let innovation flow in the EU. During extraordinary times, Artificial Intelligence has the potential to bring new opportunities to European societies and economies. From preventing car-accidents to advanced early recognition of life threatening disease, artificial intelligence will lead to major improvements in people's everyday lives. In all the fields where AI can benefit the European Union, startup entrepreneurs are at the forefront of innovation, creating cutting edge new services and devices.

As with any new technology, the new opportunities that AI brings are coupled with challenges for the regulator, many of which are still unforeseen. We, the undersigned founders and representatives of startups communities, believe that entrepreneurs and policymakers should engage in a constructive dialogue to ensure that any AI legislation is clear and straightforward so that entrepreneurs can scale the benefits of AI across Europe.

Allied for Startups and the signatories of this letter are calling European Commission to follow these startup AI recommendations:

- 1) **Firstly, any AI legislation should be principle-based:** Principles such as transparency and trust should guide any legislative intervention to leave a broad scope for entrepreneurs to innovate.
- 2) **Any new legislation should go hand in hand with existing legislation:** enforcement of already existing legislations relating to the digital economy is a prerequisite step before assessing if a new legislative intervention is necessary.
- 3) **Legislation on AI should be understandable for entrepreneurs:** it should be understandable for them how to comply and if their products and services are classified as low risk or high risk applications.
- 4) **Legislation on AI should be implementable for entrepreneurs:** both in terms of not having too complex rules or a too high regulatory load, the cost of compliance for legislation overall should be proportional to the different stages of startups and not become an ever-growing significant obstacle to starting up.

AI is almost a ubiquitous feature on tech startups. Regulation shouldn't be an obstacle but rather an expectable and understandable requirements checklist, to be set and followed through their growth path.

The startup ecosystem is proving along the way its central value for innovation and the economy, while sustaining a human centered and non-discriminatory approach. Only by fostering a diverse participation through clear regulation, the active community of startups can develop its resourceful potential and powerful economic worth.

A startup-friendly approach to AI also takes into consideration the entire ecosystem and its interconnected nature. It takes a holistic view: the development and deployment of AI in Europe is influenced not just by one legislation, but also by a functioning Single Market which includes the availability of non-personal and public data.

A proportional approach, not applying the same blueprint to every startup, can be a first step to ensuring that regulation does not unnecessarily stand in the way of innovation.

Any startup is an idea and a dataset away from a ground-breaking new product or service. Entrepreneurs are consumers-driven, their innovations can positively benefit societies and economies across Europe, either through the added value of their product or services or through their job creation. With them in mind, European AI legislation can provide a clear path to scale up in Europe.

Signatories:

Benedikt Blomeyer
Allied for Startups

Markus Raunig
AustrianStartups

Peter Kolfer
Danish Entrepreneurs

Ivan Vasilev
BESCO - The Bulgarian Startup Association

Simon Schaefer
Startup Portugal

Panos Zamanis
Hellenic Startup Association

Carlos Mateo
Spanish Startups Association

Sara Härmälä
Upgraded - Health Startup Association of
Finland



Gianmarco Carnovale
Roma Startup

Nicolas Brien
France Digitale

Diego Soro
Chamberi Valley

Doina Popa
Codette

Simon Azzopardi
Silicon Valletta

Marta Pawlak
Startup Poland

Alisson Avila, Co-Founder
Beta-i / Portugal

Augustin Jarak
Startup Croatia

Pieter Veldhuizen
Dutch Startup Association

Allied for Startups on Artificial Intelligence

The combined potential of entrepreneurial startups and AI technologies is limitless, with groundbreaking discoveries within reach. Artificial Intelligence startups have the potential to solve some of the world's biggest challenges, ranging from combating climate change to more efficient allocation of scarce resources for the circular economy. Artificial Intelligence can also lead to profound improvements in [people's everyday lives](#). This can range from improved early recognition of life-threatening diseases to a prevented car-accident. In all these fields, startups are at the forefront of innovation, pioneering new products and services. Entrepreneurs are constantly designing, testing and refining AI algorithms that would have been considered unfeasible a few years ago.

Startup entrepreneurs are passionate and ambitious about the potential of AI, but they are not naive or blind. As with any technology, the new opportunities it brings are coupled with new policy challenges, many of which are unforeseen. At the outset of the ensuing policy discussion it will be important to ensure a constructive dialogue that is not bipolar, either labelling AI as the solution to all problems or the advent of killer robots. Instead, it is constructive to start a discussion with the startup-entrepreneurs and AI experts, focused on what the practitioners are currently working on and are looking to do.

Forthcoming Artificial Intelligence legislation should therefore be centered around the idea of providing a clear and straightforward framework for startup entrepreneurs to operate with. A harmonised European approach can pave the way for easier deployment and scale-up of AI across Europe.

Formulating [AI principles](#) on a European level can be an advantageous first step for creating future-proof legislation. Unlike overly prescriptive legislation, or legislation that is technologically specific, it can leave a broad scope for startup entrepreneurs to innovate in.

For startup entrepreneurs, AI principles need to be boiled down to concrete and actionable advice. By default, startups are building new products and services in new ways. They will not have a bigger player in the market doing something similar they can learn from. Due to their nature a standard modus operandi will often not apply. They need to figure out how their unique business becomes compliant from scratch. Startup entrepreneurs also have less resources and time to do this. A principle based approach can only support innovation from startup entrepreneurs if it takes this into account. In other words, AI legislation works best when it is made operational for startups, providing concrete use-cases.

A principle based approach to AI legislation that encourages startups can be facilitated with the following startup reality-check:

- **Explainability for a startup entrepreneur:** AI is another technically complex field which will require translating values to a rapidly changing innovative field. As much as entrepreneurs have a responsibility to explain their work and vision to policy makers, policy makers also need to design laws that can be understood and navigated by smaller players, the startups.
 - Design AI rules that a small AI startup team can comprehend. Provide a roadmap for any startup to create due diligence for its product/service.
 - Create rules that make an AI liability regime in a complicated value chain comprehensible, with the view of establishing a 'fail-proof' environment. A 'fail-proof' environment would enable entrepreneurs to have a second chance and not chill investors from dedicating resources to AI.
- **Startup & Innovation Principle:** Any legislation, even in a field categorised as high-risk, should be constructed through the lens of a startup entrepreneur building a company in that sector. The ambition of a good law should be implementability by everyone. The costs of compliance for legislation overall, considering the entire picture of legislation including GDPR and others, should not become an ever-growing significant obstacle to starting up. The alternative would be to leave the sector to the big incumbent players who can navigate complex legislation.
 - Make legislation operational around concrete use-cases of startups trying to innovate in AI, both for low-risk or high-risk applications, with a specific focus on the impact of ex-ante rules / conformity checks.
 - Consider whether a startup developing AI in a low-risk or high-risk field poses the same concerns as larger, more established players, or whether the challenges are different and therefore merit a different response.
 - Consider whether, in the process of setting up digital innovation hubs and promoting innovation, regulatory sandboxes on an EU level might provide startups with the flexible opportunities befitting their potential.
- **Not a Startup, but a Startup Ecosystem Perspective:** New AI rules should be designed with the collection of startup ecosystems in mind, and not by looking at a single large company. Build on the fact that Europe has its own competitive advantages in AI, for instance in research or with ambitious, nascent startup ecosystems. Build on these advantages by assuming an ecosystem perspective.
 - Ensure the proper enforcement of relevant existing legislation, including the Free-Flow of Non-Personal Data Regulation, the Public Sector Information Directive or the Copyright Directive (regarding Text & Data Mining), through the perspective of supporting AI startups in Europe.

- Consider an AI refit of existing legislation impacting the development and deployment of AI in Europe.
 - Minimise bottlenecks for startup ecosystems where there is a clear problem and a clear solution. On data access, determine where exactly the problem of the entire ecosystem is. Consider soft measures to incentivise larger companies to share their private data with startup ecosystems.
 - The creation of data spaces will aggregate anonymised, public and private data in a number of areas. For startups training AI algorithms, this has high potential value.
- **Minimise intervention in startup innovation.** AI applications have varying levels of risk, depending on a variety of variables. An adapted approach, not applying the same blueprint to every startup, can be a first step to ensuring that regulation doesn't stand in the way unnecessarily of innovation. A distinction between high and low risk sectors or use-cases should still keep in mind that there are ambitious startups operating in all fields.
 - Consider if there is a specific use-case or sector that needs a regulatory intervention and whether there is evidence supporting the case for a systemic intervention. If it is needed, two primary concerns should be:
 - Innovation in this field by startups should still be possible, and rules should still be comprehensible, as per the points above.
 - Focusing the rules to ensure as little spillover into other sectors as possible. Startups innovating in multiple fields, low and high risk, should have a clear perspective from policy makers.
 - Ensure that the distinction between low and high level will not create a legal chasm where it will only be worth operating in low-risk areas. The larger the difference between the two, the larger the artificial intervention in the market. Ultimately, if a broad suite of sectors is considered high level it will crowd out innovation from the bottom, so only large companies can survive.

Conclusion

Startups are key innovative players in the EU. There are a lot of entrepreneurs working on creating cutting-edge AI products or services which will benefit societies and economies around Europe. To give startup entrepreneurs the best possible opportunity to scale, any law on AI law needs to be both *understandable* and *implementable* for them.

This includes a clear distinction between low and high risk applications to the extent that not every application is in the latter category and that the distinction does not lead to a large legal chasm between the two categories. The consideration of sandboxes over excessive ex-ante conformity rules is encouraged.

A startup-friendly approach to AI also takes into consideration the entire ecosystem and its interconnected nature. AI development and deployment in Europe is influenced not just by one AI regulation, but also by the availability/non-availability of free flow of non-personal data, a fully implemented Public Sector Information directive and the ability to conduct Text & Data Mining.

An approach that is principle-based and protects European values does not have to come at the cost of innovation. It asks for a lawmaking process that puts startups first. Startups are the prime example of entrepreneurs with a ground-breaking idea looking to do the right thing. With them in mind, European AI legislation can provide a clear path towards scaling up in Europe.

Examples of groundbreaking AI innovations

Health

A Danish startup [Corti.ai](#) developed AI technology that has the potential to [save thousands of people](#) from suffering cardiac arrest. Their solution combines advanced voice and pattern recognition technology to accurately identify cardiac arrests during emergency calls. Corti leverages machine learning to analyse patients' symptoms by listening to a large number of patient interviews. Since the COVID-19 pandemic began, Corti has [adapted its technology](#) to help curb the transmission, monitor infected patients at home, map the spread of infection and reduce the risk when triaging patients.

[Icometrix](#) developed an AI technology to quantify disease-specific brain structures on MR and CT scans. Startup's solutions enable health care providers to uncover brain abnormalities more accurately, evaluate brain structural changes and improve patient outcomes by better monitoring. For example, their solution enables to reduce time on suboptimal treatment for multiple sclerosis patients from 3.9 years to 1.2 years. In response to the COVID-19 pandemic, Icometrix and their academic partners are [developing AI software](#) for chest CT images, which helps to quantify the degree of lung involvement in COVID-19 patients.

A Swedish Startup [AMRA Medical](#) combines AI, machine learning and big data for precision medicine. Their solution enables clinicians and researchers to better understand individual variability in genetics, lifestyle, biology, and body composition. Startup's whole-body MRI and automated cloud-based image analysis allows the monitoring of changes in fat and muscle volumes. It gives biomarkers, disease insights, and precision to improve the research and decision-making across a range of therapeutic areas. The startup is aiming to generate the world's largest imaging dataset on Body Composition Profiling.

Transport

Hamburg-based startup [Cargonexx](#) created an intelligent tool for truck transportation. It is the first digital freight forwarder which employs AI to reduce empty runs and greenhouse gas emissions. The use of machine learning algorithms and deep neural networks enables the system to memorise knowledge and ever-changing conditions throughout the logistics industry as well as to predict prices and fluctuations in capacity, enabling the system to react in real-time. More than 8.000 transportation companies are registered with Cargonexx.

Energy

Cologne-based startup [Envelio](#) develops software for the digital transformation of energy grids. Their solution, Intelligent Grid Platform, is a digital assistance system that supports

distribution grid operators in their workflows with regard to planning and operation of power systems with high shares of renewables. The startup uses AI technologies, such as machine learning, to increase data quality, correct data errors and create validated grid models across all voltage levels.