

# The Misaligned Compass: How Europe's Quest for Digital Competitiveness and Sovereignty is Going Off Track

Seamus Allen



## 1. Introduction

The achievement of a competitive and digitally sovereign Europe is the ambition at the heart of the European Commission's policy agenda for 2024 - 2029. However, the EU's overall strategy to do so risks veering off course in ways that may undermine its aspirations. The motivating rhetoric behind this ambition is now familiar: Europe is falling behind the US and China in terms of economic competitiveness, particularly in the digital technology sector, and it must act urgently to avoid further falling behind.<sup>1</sup> Europe's lack of technological capabilities has also driven anxiety about risks to Europe's society and values – fuelling the European Union agenda of “digital sovereignty.” In 2020, President of the European Commission, Ursula von der Leyen declared that Europe must achieve digital sovereignty, which she defined as: “the capability that Europe must have to make its own choices, based on its own values, respecting its own rules.”<sup>2</sup> Five years later, in Ursula von der Leyen's second term as European Commission president, Europe's capability to make its own choices and enforce its own rules and values seems threatened in ways it never has been before.<sup>3</sup>

The Commission now has a blueprint and ambitious agenda to invigorate Europe's economy and achieve competitiveness and sovereignty for Europe. Some of the key aspects of this agenda include: 1. major public investments to boost competitiveness, particularly in the digital economy; 2. completion of Europe's single market; 3. the reduction of regulatory burdens; and 4. the promotion of European champions. This paper examines these four aspects of the EU's agenda in turn. It then discusses the merits of creating a digital sovereignty strategy for Europe. In principle, there are many positive features of the Commission's agenda to boost Europe's competitiveness and achieve digital sovereignty. However, the Commission's current approach risks becoming unbalanced and misdirected in ways that could divert away from achieving the EU's goals – and which may in some cases risk undermining them. The EU's policy agenda risks focusing more on quantity, size, scale, and hype than on quality and substance. This means that the EU may indeed massively invest in tech innovation, complete the single market, reduce regulatory burdens, and launch European champions as the Commission aspires to – and yet fail to make Europe either sovereign or competitive.

## 2. Intelligent Investment?

The Commission has announced a series of major investment initiatives to promote Europe's digital competitiveness. Examples include the EU's pledge of €50 billion for the InvestAI Initiative,<sup>4</sup> €20 billion for AI factories,<sup>5</sup> and €1.3 billion for “critical technologies” through the Digital Europe Programme<sup>6</sup> – amongst others. Most recently the Commission has adopted an “Apply AI Strategy” which commits €1 billion to promoting AI uptake across eleven sectors.<sup>7</sup>

This ambition is welcome in principle; major investments are needed to boost Europe's digital competitiveness. Arguably state investments in technological innovation can potentially have an accelerating effect on technological development<sup>8</sup> and indeed it has been argued that US state funding played a critical role in the development of the digital economy including the internet itself.<sup>9</sup> However, whether or not EU money will be invested effectively is a separate question.

The Commission and Member State governments have a history of mispending money on over-hyped applications of particular technologies – including dubious metaverse<sup>10</sup> and blockchain applications.<sup>11</sup> Even applications of genuine economic importance – from search engines<sup>12</sup> to cloud computing<sup>13</sup> – have been areas of costly public investment that have either failed or have achieved much less than initially hoped.<sup>14</sup>

Many of the Commission's criteria to measure the success of the digital economy rely on arbitrary quantitative metrics for which there seems to be little justification – such as the EU's goal to produce 20% of the world's semiconductors by 2030<sup>15</sup> (despite the EU making up only 5.6% of the world's population);<sup>16</sup> and the EU's goal that 75% of businesses should use AI, cloud computing or big data by 2030.<sup>17</sup> The EU Court of Auditors recently described the EU's strategy to produce 20% of the world's semiconductors as: “deeply disconnected from reality.”<sup>18</sup> In some cases tech hype has led policymakers to adopting technologies that are not only unnecessary but potentially less effective than lower-tech equivalents (like using an AI chatbot tool for European Parliament archives).<sup>19</sup>

The disproportionate focus on AI in particular comes at a time of growing evidence that there is an AI bubble<sup>20</sup> and that the productive capacity of many AI applications in many sectors of the economy have been grossly exaggerated.<sup>21</sup> Concerningly also, the Commission's vision of AI is a relatively narrow one – focusing disproportionately on particular variants of AI that are currently most hyped, including deep learning variants, large language model generative AI, and

those that rely on ever vaster quantities of data to achieve better results. Yet, some leading AI experts argue that the greatest future advances in AI technology will eventually come from alternative approaches to AI.<sup>22</sup> The Commission's recently adopted "Apply AI Strategy" suggests once again that there is a flawed focus on promoting tech uptake for the sake of uptake. For example, the Commission hopes to promote an "AI first policy" in which "AI is considered as a potential solution whenever organisations make strategic or policy decisions, taking into careful consideration the benefits and the risks of the technology."<sup>23</sup> Given the wide variety of areas where AI's benefits have been exaggerated<sup>24</sup> this may lead to wasteful AI adoption in areas where it is not the optimal solution. Indeed, the strategy promises to promote AI even for use-cases where there is arguably a track-record of poor AI efficacy or where AI is unlikely to add meaningful value; and may prioritise overhyped superficially impressive AI applications rather than meaningful AI innovation.<sup>25</sup> The current EU approach thus risks wasting resources on over-hyped technologies or technologies that will easily become outdated, and risks promoting technological uptake for the sake of uptake rather than to provide meaningful social benefits or in ways that enhance Europe's capabilities.

The EU could consider adopting new strategic guidelines to improve the effectiveness of EU investment in the digital economy. These guidelines should ensure that money is not wastefully spent on promoting technological uptake merely for the sake of doing so. These guidelines could provide methodology and metrics to ensure that investment provides either real social benefits or else enhance Europe's long-term technological capabilities. For example, investments that promote cutting-edge research and skills development in areas where Europe is lagging may be more likely to lead to long-term productivity gains. The guidelines should embrace a calculated level of risk; it is necessary to accept that a certain proportion of investments will turn out unprofitable, in order to ensure that investment can also be allocated to riskier areas of cutting-edge innovation. The guidelines should also attempt to future-proof the EU's overall approach toward promoting technological innovation. The EU's current strategy for AI, for instance, is focused on particular versions of AI that are currently predominant in industry, and may neglect the alternative approaches to AI that may be the most important in the long-run.<sup>26</sup> Lessons could be drawn from past public investment failures and successes, in both the EU and internationally. In some other cases, public investment may be justified on the grounds of protecting Europe's digital sovereignty – however such investments should be firmly distinguished from those with a competitiveness rationale and justified in accordance with robust criteria, as will be outlined later in this paper.

### **3. The Mirage of the Single Market Panacea**

A prevailing narrative about Europe's lack of competitiveness identifies the lack of a proper European single market as a key culprit.<sup>27</sup> It is frequently argued that fragmentation in Europe's market prevents European companies from scaling up, thus harming the EU's competitiveness relative to the US and Chinese economies.<sup>28</sup> It is often assumed that completing the single market is one of the keys to unlocking Europe's competitiveness, which has motivated the new EU single market strategy.<sup>29</sup> Indeed, there may be many areas where Europe may stand to benefit from further completion of the single market.

However, there are a number of things wrong with the narrative above, and an excessive focus on completing the single market may distract policymakers from more important objectives. In particular, it may mislead policymakers into focusing more on the quantitative scale of Europe's single market than on its underlying quality.

Firstly, the idea that the US and China are outcompeting Europe because they possess completed internal single markets is overstated. It is often overlooked that there are major trade barriers within both the US and Chinese economies, between the states of the US and between the provinces of China. There are even specific areas where such barriers arguably exceed those within the EU economy. In the 2022 essay "Single-Market Power: How Europe Surpassed America in the Quest for Economic Integration" Associate Professor Matthias Matthijs and Professor Craig Parsons write, "Which has a more complete single market, the United States or the European Union?...in the regulation of interstate exchange, the EU has a more complete single market than the United States."<sup>30</sup> This is not a new argument. In 1987, Steven G. Craig and Joel W. Sailors wrote that the "substantial barriers to interstate trade" within the US is "a more serious problem" for US trade than the "barriers to international trade" which were "only a small part of the trade problem facing the United States."<sup>31</sup> Other American economists and political scientists have likewise highlighted the major significance of economic barriers to trade between the states of the US.<sup>32</sup> This fragmentation can include key areas of relevance for the digital economy – for example, with regards to personal data, currently twenty US states each have their own privacy law.<sup>33</sup>

Within the Chinese economy there are also barriers to trade between the provinces including regulatory barriers and protectionist policies<sup>34</sup> that are so significant that addressing them has become an important focus of Chinese national policy.<sup>35</sup> In 2022, China launched a “National Unified Market” initiative to try and counter local protectionism and reduce fragmentation of the Chinese single market.<sup>36</sup> In January 2024, Stanley Wu at the CSIS wrote that in China “There is considerable distance yet to be traversed in achieving the “unification from within” and unleashing the full potential of a unified Chinese market.”<sup>37</sup> There are aspects of the Chinese economy such as the Hukou system, which restricts the effective mobility of the Chinese labour force in ways that can be compared unfavourably with freedom of movement in the EU.<sup>38</sup> Despite major reforms in recent years the Hukou system remains a major barrier to Chinese internal mobility.<sup>39</sup>

Secondly, the idea that a quantitatively large single market is necessary or sufficient to be competitive or digitally successful seems misguided. Many digital economy frontrunners such as Japan, South Korea, Taiwan, and Singapore, have much smaller populations and domestic markets than the EU. Yet, in many areas of digital technology the EU lags behind Japan<sup>40</sup>, South Korea,<sup>41</sup> and Taiwan<sup>42</sup> despite the fact that these countries lack anything close to the EU’s market size. Indeed, these examples highlight that EU decision-makers often fixate too much on comparisons between the EU on the one hand and either the US or China on the other. The EU is very different from the US and Chinese economies – and therefore in some cases (though not necessarily all) policies that work in the US or China may not work as effectively in the EU. In contrast, lessons that have guided the success of Japan, South Korea, and Taiwan may sometimes be as applicable and as beneficial for the EU as lessons it can learn from the US and China. Even within the EU, it is often smaller Member States that are digital frontrunners. Denmark was ranked as the world’s third most digitally competitive country out of the countries studied in 2024 by the Institute of International Management Development – ahead of the US.<sup>43</sup> Singapore and Switzerland were ranked first and second.<sup>44</sup> The Global Innovation Index for 2024, produced by the World Intellectual Property Organization, meanwhile ranks EU Member Sweden in second place for innovation globally, ahead of the US (with Switzerland ranked first).<sup>45</sup> Homogenising the EU’s policy and market framework is unlikely to be beneficial if the EU is homogenised at the level of its worst performing Member States rather than its frontrunners. The data above also suggests there may be significant scope to help Member States to bolster innovation and competitiveness without completing the single market.

Thirdly, policy diversity can be beneficial by facilitating policy experimentation and iterative policy improvements - as has sometimes been the case within the US and China. This does not mean that policy diversity and experimentation must lead to permanent fragmentation; indeed as has sometimes happened in the US and China, policies of certain states and provinces that are deemed successful became gradually imitated by others, allowing for a process of gradual integration and policy improvement. In the US the phrase the “California effect” refers to a phenomenon in which regulations adopted by one state (initially California) have been gradually adopted by other US states, based on the example of California’s regulations on automobile pollution.<sup>46</sup> Similarly in China, localised policy experimentation proved to have consequences for national policy<sup>47</sup> including the special economic zones such as Shenzhen<sup>48</sup> or agricultural reforms in Xigang<sup>49</sup> which would both subsequently influence Chinese policy nationally.<sup>50</sup> Indeed, it has been argued that policy learning between EU Member States has led to countries imitating the successful policies of other Member States without centralised EU regulation – with examples potentially including areas such as energy, pensions, and health policy.<sup>51</sup> Especially with regards to dynamically changing digital technologies, there may be advantages to facilitating policy experimentation and iterative policy improvement, which can be undermined by excessive regulatory harmonisation.

Fourthly, the assumption that closer single market integration is automatically beneficial can lead to policymaking of a lower quality than may otherwise be the case – including regulations that are unnecessarily burdensome. Regulatory impact assessments often economically justify European regulations on the grounds that closer market integration will outweigh any new economic burdens of regulations.<sup>52</sup> But the benefits of cross-border harmonisation may be overstated. For example, regulatory impact assessments often state that regulations will benefit SMEs due to the increased ease of cross-border trade – but most SMEs do not engage in cross-border trade in the first place.<sup>53</sup> This means that in some cases the drive toward the single market may actually impose greater regulatory burdens on small businesses without providing any accompanying benefits. It is also notable that determining the optimal policy framework is often challenging and complex – adopting one set of harmonised regulations centrally does not necessarily guarantee that better quality regulations will be enacted. After years of passing dozens of new legislative initiatives, many EU policies are now being reassessed as part of an EU simplification agenda, premised on the idea that many of these recently passed regulations are unnecessarily burdensome. Potentially, in some cases, had the Member States regulated at a national level in some of the areas where recent EU regulations have been passed, it is possible that some Member States may have found a better ratio of benefits-to-burdens in their regulations.

Likewise, while closer integration can sometimes be beneficial for Europe's digital sovereignty, this is not necessarily always true. There are arguably examples where excessive centralisation has caused sovereignty risks for Europe – ranging from hindering data protection enforcement<sup>54</sup> to restricting Member State capabilities to respond to disinformation.<sup>55</sup> There are also examples where political influence on the Commission from foreign actors has influenced EU central decision-making ranging from disinformation<sup>56</sup> to digital tax.<sup>57</sup>

EU policymakers could seek to ensure that the costs, and not only the benefits, of harmonisation and centralisation are assessed in EU policymaking. Policymakers could adopt a renewed focus on market quality, including the quality of the policy framework – and seek to balance considerations of this with market size and scale. In particular the merits of policy diversity, experimentation and innovation should be reappraised and taken into account. Otherwise fixation on the completion of the single market risks driving integration even in areas where it may be counterproductive. It could risk leading to the creation of a single market that may be perfectly integrated – but in a monolithic policy framework that could potentially be cumbersome, rigid, and stagnant.

## 4. The Regulation and Champions Debate

It is welcome that policymakers are now paying greater attention to how heavily burdensome many regulations can be. However, a common narrative that over-regulation has undermined Europe's digital competitiveness<sup>58</sup> compared to the US and China and inhibited the growth of European champions seems misguided. It is arguably the case that China has a more heavily regulated digital economy than Europe.<sup>59</sup> Many US tech giants began scaling up within and across European borders long before they became the major tech giants they are today.

The conviction that over-regulation is one of the main culprits for Europe's lack of competitiveness may lead to harmful consequences. This conviction risks becoming a lens that distorts the vision of policymakers – into over-estimating the competitiveness gains of reducing specific regulatory burdens and under-estimating the harms that may unintentionally result from the reductions of such regulatory burdens. Furthermore, some regulation can sometimes be beneficial for innovation and competitiveness – and an indiscriminate deregulation drive may risk undermining such regulations also. The Commission is considering reforming the GDPR – yet the parts of the GDPR designed to promote innovation – such as data portability – have not yet been sufficiently manifested into practice.<sup>60</sup> The proposal for an AI liability directive was withdrawn as part of the regulatory simplification agenda.<sup>61</sup> Yet, some argue the AI Liability Directive is necessary to facilitate innovation by protecting smaller businesses at lower levels of the AI value chain from disproportionate liability relative to larger companies.<sup>62</sup> Areas such as data portability, competition, and interoperability all represent areas where regulation can help to drive innovation and competitiveness as is arguably the case with Europe's policies such as the Digital Markets Act<sup>63</sup> and Data Act.<sup>64</sup> Still, other regulations may play a role in building economic resilience in ways that bolster long-term economic competitiveness – as some argue is the case with financial regulations designed to prevent a repeat of the 2008 financial crisis.<sup>65</sup> Something similar arguably may be true with having a well-designed cybersecurity and cyber-resilience policy framework.

Part of the narrative about the need to complete the single market and reduce regulatory burdens holds that these are necessary steps to allow European companies to scale up and become European champions – that is tech giants of Europe's own. However, the assumption that European tech giants would necessarily be beneficial for Europe's competitiveness may also be misleading. Major European tech companies will not magically make Europe competitive. Such companies can be a symptom of economic weakness; as the Nobel Prize winning economist Joseph Stiglitz has recently argued, often “a trillion-dollar firm could be...a symptom of bad economic policy.”<sup>66</sup> Some economists, such as Thomas Philippon, argue that the greater prevalence of large corporations in the US relative to the EU has had negative consequences for the US economy which the EU has avoided due to greater competition within EU markets.<sup>67</sup> There are also other risks with depending on major champion companies as an economic model. Some argue that Finland experienced economic stagnation by becoming over dependent on the fortunes of Nokia, which at its peak accounted for 20% of Finland's exports before Nokia's technology became outdated.<sup>68</sup> This is not to say that Europe does not need major companies. But the assumption that possessing European tech giants will inherently make Europe more competitive is a misguided one that may lead to harmful and counterproductive policy decisions.

Furthermore, a fixation on creating European digital champions and on deregulation also poses major risks to Europe's pursuit of digital sovereignty. European digital sovereignty could be described as meaning that Europe has the capability to enforce its own values and policy preferences in the digital realm and to ensure that Europe's values and policy

preferences are not undermined by digital technologies.<sup>69</sup> It is misguided to assume that creating European “digital champions” – tech giants of Europe’s own - will deliver Europe’s digital sovereignty. Many of the risks to social values and sovereignty allegedly posed by some American tech companies in the EU may be similarly posed in the US to American values and to American sovereignty. Russian propaganda and electoral interference in the US (as well as in Europe) has taken place through American platforms.<sup>70</sup> The same is true with Chinese propaganda.<sup>71</sup> American platforms have themselves been accused of politicised interference in US politics.<sup>72</sup> Some tech companies which are accused of threatening European values and democracy in Europe are European companies – such as Cambridge Analytica and the spyware company Intellexa.<sup>73</sup> Just because companies are European does not necessarily mean they will be aligned with European values. Assuming that they will be risks backfiring with potentially serious consequences, for instance if they are regulated more leniently than they otherwise may be. European tech giants may pose as many risks to Europe’s digital sovereignty as would tech giants of a foreign origin. Regulation is necessary to ensure that such companies will be aligned with, and serve, European values.

There is a need to rebalance the debate on regulation and digital champions. Indigenous European tech giants could potentially bring benefits to Europe; and it is welcome to cut regulatory burdens where they are genuinely unnecessary and lack benefits.

However European tech giants and the reduction of regulatory burdens will not by themselves make Europe either competitive or sovereign - and disproportionately focusing on easing regulatory burdens and the creation of European tech giants may even counterproductively harm Europe’s competitiveness and sovereignty.

## 5. The Need for a Digital Sovereignty Strategy

As mentioned above, European digital sovereignty could be described as meaning that Europe has the capability to enforce its own values and policy preferences on the digital realm and to ensure that Europe’s values and policy preferences are not undermined by digital technologies.

Using this description, there are areas where Europe’s sovereignty may be at risk – for example, if digital platforms may have the capability to manipulate European elections,<sup>74</sup> or if the enforcement of Europe’s privacy values is not possible without major economic disruption due to the laws of foreign jurisdictions.<sup>75</sup> Sometimes technological change itself may pose risks to traditional conceptions of sovereignty, in areas ranging from taxation to electoral interference to cybersecurity.<sup>76</sup>

However, in other cases the EU’s sovereignty, in relation to digital policy, may be challenged for reasons that are political. This risk has recently manifested in an especially prominent way due to the Trump administration in the US exerting pressure on the EU to roll back its digital policy regulations.<sup>77</sup> A striking case of the geopoliticisation of digital policy in ways that may have negative implications for Europe’s sovereignty can be seen in the case of social media. Social media platforms with close political ties to foreign governments have been accused of deliberate political interference in Europe’s elections.<sup>78</sup> There are also concerns that interference in European politics is becoming an official US policy.<sup>79</sup>

At the same time, the US has pressured the EU to roll back tech regulations, including those that could be used against social media that facilitate such electoral interference.<sup>80</sup> The US has threatened trade tariffs against the EU to pressure the EU to roll back its digital policy regulations.<sup>81</sup> The US has threatened sanctions against European officials who enforce regulations on American social media in ways that the US deems to be censorship of American voices.<sup>82</sup> Yet, US policy in relation to social media has been expanding in ways that provides an unprecedented role for the US government in shaping social media, potentially including censorship and undermining the ability of Europeans to contribute to American online discourse.<sup>83</sup>

There are other ways that Europe’s sovereignty may be at risk. The overwhelming dependence of Europe on American cloud providers recently gained renewed attention when it was reported that US sanctions policy led Microsoft to block account access of an ICC official.<sup>84</sup> This sparked concerns across Europe about whether the US could threaten to suspend cloud services to European governments to exert pressure on them.<sup>85</sup> Much of the concerns about Europe’s sovereignty focus on dependencies on small number of dominant providers.<sup>86</sup> Regulations which may help to reduce the EU’s dependencies on a small number of dominant tech providers, such as the Digital Markets Act are one of the primary targets of US pressure against Europe.<sup>87</sup> There is a risk that the EU will feel pressured to compromise on digital policy regulation; however, doing so may make Europe even more vulnerable and dependent – meaning it may subsequently countenance even more severe demands that it may not have previously considered at the outset.

Europe's digital sovereignty is arguably at risk in ways it was not previously. Yet, the term "digital sovereignty" has become an over-used buzzword that is now associated with an excessive range of technologies, simply because such technologies are economically desirable and hyped, or because they are predominantly developed outside of the EU – from the metaverse<sup>88</sup> to generative AI.<sup>89</sup> The EU's Apply AI Strategy, for instance, regularly mentions "sovereignty" in reference to a wide varieties of AI technologies, including for many technologies for which it is not necessarily clear that significant sovereignty risks actually exist.<sup>90</sup> This risks diluting the meaning of the term and wasting Europe's scarce resources. Some cutting-edge technologies may receive great public attention and hype, but this does not necessarily mean that they pose major sovereignty risks. In contrast, some less technologically complex services, such as social media, may be a critical digital sovereignty risk. It is not necessarily clear that Europe needs to produce its own version of ChatGPT in order to be sovereign. Semiconductors are a sector where Europe arguably does face real potential sovereignty risks, but it is not clear that Europe's sovereignty requires the production of 20% of the world's semiconductors by 2030 (as is the goal in the EU's digital compass).<sup>91</sup> Some of the sectors where Europe faces significant sovereignty risks may also be areas where Europe has a more realistic chance of addressing the consequences of its lagging digital economy performance – as may potentially be the case, for example, with social media, communications apps, and search engines. It is notable that the East Asian countries have strong indigenous performers in these sectors (e.g. Line in Japan<sup>92</sup>; Kakaotalk and Naver in South Korea.<sup>93</sup>) Indeed, even within some EU Member States there are some local rivals to American service providers (such as the Seznam search engine in the Czech Republic.)<sup>94</sup>

The recent Digital Sovereignty Summit in Berlin in November 2025 exemplifies some of the opportunities and risks that are involved in Europe's pursuit of digital sovereignty. On the one hand it illustrated how the concept of digital sovereignty could be exploited while real sovereignty risks are neglected. There were energetic proposals (particularly by France) to support European champions; to impose European preferences in public procurement rules; and to reduce regulatory burdens in order to benefit European companies.<sup>95</sup> This vision could ultimately lead to a scenario in which Europe's sovereignty is undermined at the hand of European big tech firms – which may be uncompetitive (but sustained through public money); on which Europeans have legally locked themselves into (because of European preferencing rules) and which neglect Europe's values without accountability (because they are loosely regulated.)

However, a much more positive development was the Declaration on Digital Sovereignty, an initiative spearheaded by Austria, and ultimately signed by all EU Member States at the Berlin Digital Sovereignty Summit. The Declaration emphasised that digital sovereignty referred to Europe's capability to "act independently and in a self-determined manner" based on "its own laws, values, and security interests."<sup>96</sup> It highlighted the need to address real digital sovereignty risks – such as addressing dependencies, protecting democracy, and ensuring Europe's capability to regulate and to make free choices.<sup>97</sup> It explicitly disavowed protectionism as "neither realistic nor desirable" emphasising the importance of international cooperation instead.<sup>98</sup>

The EU could develop a digital sovereignty strategy for Europe, in line with the vision set out in this declaration, that would establish clear metrics and criteria to narrowly define areas where Europe's sovereignty is genuinely at risk. In order to protect sovereignty, Europe can regulate, diversify or invest. Regulation and the enforcement of such regulation is important – European companies can threaten European values as is the case with Cambridge Analytica or spyware companies such as Intellexa.<sup>99</sup> Just because companies are European does not mean that they will be aligned with Europe's values or strengthen Europe's sovereignty; regulation will be necessary to ensure they will be.

Diversifying is important – to be in a position of dependence on a small number of key providers which can control core parts of Europe's infrastructure or information space is a risk to Europe's sovereignty regardless of whether or not the company is European. The strategy's diversification focus should also guard against European protectionism, which is a distraction from sovereignty. Europe cannot be self-sufficient in all technologies and trying to do so will be counter-productive. Nor can Europe avoid having dependencies - but it could try to minimise the risk of one-way dependencies which make it vulnerable, by nurturing interdependencies in which it is dependent on partners who are equivalently dependent on Europe. The EU should pursue healthy interdependencies with diverse international partners to reduce dependencies on the US and China. This could include building on the EU's digital partnerships that exist with democratic digital frontrunners such as Japan, South Korea, and Taiwan.<sup>100</sup>

In some areas, Europe's digital sovereignty could be promoted through public investment – including when the establishment of European alternatives is the best option or only option for ensuring sovereignty. A digital sovereignty strategy could guide investment decisions of public money in key areas where Europe is facing real sovereignty risks

and clearly distinguish these from investments that may be economically beneficial and competitiveness-related but that are unnecessary for European sovereignty. Without such a firm distinction, digital sovereignty risks becoming a buzzword that cannot be distinguished from Europe's general economic performance, distracting policymakers from real sovereignty risks. For example, amongst other areas, public investment could potentially play a role in promoting diversification and pluralism in social media, to reduce dependence on politicised foreign social media. This could potentially involve establishing independent and pluralistic public service social media, modelled on a similar framework of independence as exists for traditional public service media.

## 6. Conclusion

There are many positive features about the European Commission's agenda to invigorate Europe's competitiveness and to achieve digital sovereignty. There could be significant benefits in publicly investing in European tech innovation; in reducing many single market barriers; in easing regulatory burdens; and in achieving the creation of European champions.

However, as this paper argues, the EU may indeed massively invest in tech innovation, complete the single market, reduce regulatory burdens and launch European champions— and yet fail to make Europe either sovereign or competitive.

Investing in technological innovation to boost Europe's competitiveness is welcome – but strategic guidelines are needed to ensure effective, intelligent investment that avoids the mistakes of the past. There are likely to be many areas where Europe's economy can benefit from a more complete single market – but perfect single market integration alone will not make Europe competitive. The evidence suggests that other factors are even more important than market scale. Furthermore, policy diversity, experimentation, and innovation may potentially play a role in helping Europe's success and this should be taken into account in EU policy – otherwise closer single market integration may be pursued even in areas where it is counterproductive. Policymakers should also compare the performance of the EU more frequently to successful small digital economies rather than just focusing on the lessons of the US and China – with examples including South Korea, Taiwan, Switzerland, and even EU Member States such as Denmark and Sweden.

It is clearly desirable to reduce regulatory burdens when there are no negative consequences involved in doing so – but a preoccupation with such a reduction may lead to overestimating the benefits of reducing regulatory burdens and underestimating negative consequences that might arise. Some areas where regulations are likely to promote innovation may also risk being neglected. The focus on European champions may also overstate the degree to which these may benefit Europe's competitiveness and sovereignty, and divert attention away from the risks that these champions may also potentially pose to the sovereignty and competitiveness of Europe.

Finally, this paper recommends that Europe's pursuit of digital sovereignty needs to be guided by a digital sovereignty strategy that firmly distinguishes the need to address real existing threats to Europe's sovereignty from other desirable public policy objectives (e.g. competitiveness). Otherwise digital sovereignty may risk becoming a meaningless objective into which resources are squandered while real sovereignty threats remain unaddressed. Ultimately, while there are many positive features about the EU's policy agenda, the agenda currently risks focusing on size, scale, and hype, to a greater extent than quality and substance, in ways that may undermine the pursuit of a sovereign and competitive Europe.

## Endnotes

1. [Europe risks falling behind US and China without swift economic reforms, warns Draghi - TRT World](https://www.trtworld.com/article/f111133161bc), <https://www.trtworld.com/article/f111133161bc>
2. [Op-ed by Commission President von der Leyen](https://ec.europa.eu/commission/presscorner/detail/en/ac_20_260), [https://ec.europa.eu/commission/presscorner/detail/en/ac\\_20\\_260](https://ec.europa.eu/commission/presscorner/detail/en/ac_20_260)
3. [As is the case with the US's geopolitical pressure campaign EU tech regulations: 'The West as we knew it no longer exists,' von der Leyen says amid Trump tensions | Euronews](https://www.euronews.com/my-europe/2025/04/16/the-west-as-we-knew-it-no-longer-exists-von-der-leyen-says-amid-trump-tensions), <https://www.euronews.com/my-europe/2025/04/16/the-west-as-we-knew-it-no-longer-exists-von-der-leyen-says-amid-trump-tensions>; [Trump threatens new tariffs over 'discriminatory' digital rules](https://www.siliconrepublic.com/business/us-donald-trump-eu-tariff-sanctions-vi-sa-2025), <https://www.siliconrepublic.com/business/us-donald-trump-eu-tariff-sanctions-vi-sa-2025>
4. [EU to invest €50B to 'supercharge' innovation in artificial intelligence | Science | Business](https://sciencebusiness.net/news/eu-budget/eu-invest-eu50b-supercharge-innovation-artificial-intelligence), <https://sciencebusiness.net/news/eu-budget/eu-invest-eu50b-supercharge-innovation-artificial-intelligence>
5. [EU to build AI gigafactories in €20bn push to catch up with US and China | Artificial intelligence \(AI\) | The Guardian](https://www.theguardian.com/technology/2025/apr/09/eu-to-build-ai-gigafactories-20bn-push-catch-up-us-china), <https://www.theguardian.com/technology/2025/apr/09/eu-to-build-ai-gigafactories-20bn-push-catch-up-us-china>
6. [Commission to invest €1.3 billion in artificial intelligence, cybersecurity and digital skills](#)
7. [EU launches strategy to foster 'sovereign' AI ecosystem](https://euaipolicymonitor.substack.com/p/eu-launch-es-strategy-to-foster-sovereign), <https://euaipolicymonitor.substack.com/p/eu-launch-es-strategy-to-foster-sovereign>
8. Mariana Mazzucato, *The Entrepreneurial State: Debunking public vs. private sector myths*, (Penguin, 2018)
9. [Birth of the Commercial Internet - NSF Impacts | NSF - National Science Foundation](https://www.nsf.gov/impacts/internet), <https://www.nsf.gov/impacts/internet>; [Government funding made the birth of the internet possible at UCLA | UCLA](https://newsroom.ucla.edu/stories/government-funding-made-the-birth-of-the-internet-possible), <https://newsroom.ucla.edu/stories/government-funding-made-the-birth-of-the-internet-possible>
10. [EU throws party in €387K metaverse — and hardly anyone turns up – POLITICO](https://www.politico.eu/article/eu-threw-e387k-meta-gala-nobody-came-big-tech/), <https://www.politico.eu/article/eu-threw-e387k-meta-gala-nobody-came-big-tech/>
11. [Europe's Blockchain: A Solution Struggling to Find a Problem – Communications of the ACM](https://cacm.acm.org/news/europes-blockchain-a-solution-struggling-to-find-a-problem/), <https://cacm.acm.org/news/europes-blockchain-a-solution-struggling-to-find-a-problem/>; [The EU wasted €60M on a pointless fintech fad — but the Belgians won't let it die – POLITICO](https://www.politico.eu/article/brussels-sunk-60-million-block-chain-money-rail-project-wont-call-quits-white-elephant-matthieu-michel/), <https://www.politico.eu/article/brussels-sunk-60-million-block-chain-money-rail-project-wont-call-quits-white-elephant-matthieu-michel/>
12. [Europe should not respond to America's subsidies binge with its own blunders](https://www.economist.com/europe/2023/02/09/europe-should-not-respond-to-americas-subsidies-binge-with-its-own-blunders), <https://www.economist.com/europe/2023/02/09/europe-should-not-respond-to-americas-subsidies-binge-with-its-own-blunders>
13. [Gaia-X: Has Europe's grand digital infrastructure project hit the buffers? - DCD](https://www.datacenterdynamics.com/en/analysis/gaia-x-has-europes-grand-digital-infrastructure-project-hit-the-buffers/), <https://www.datacenterdynamics.com/en/analysis/gaia-x-has-europes-grand-digital-infrastructure-project-hit-the-buffers/>
14. See footnotes above
15. [The EU sets out plan to build 20pc of the world's semiconductors](https://www.siliconrepublic.com/machines/semiconductors-manufacturing-eu-2030#:~:text=In%20its%20bid%20for%20greater,buid%20its%20first%20quantum%20computer.), <https://www.siliconrepublic.com/machines/semiconductors-manufacturing-eu-2030#:~:text=In%20its%20bid%20for%20greater,buid%20its%20first%20quantum%20computer.>
16. [Key facts and figures | European Union](https://european-union.europa.eu/principles-countries-history/facts-and-figures-european-union_en), [https://european-union.europa.eu/principles-countries-history/facts-and-figures-european-union\\_en](https://european-union.europa.eu/principles-countries-history/facts-and-figures-european-union_en)
17. [Europe's digital decade: 2030 targets | European Commission](https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/europes-digital-decade-digital-targets-2030_en), [https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/europes-digital-decade-digital-targets-2030\\_en](https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/europes-digital-decade-digital-targets-2030_en)
18. [EU microchip strategy 'deeply disconnected from reality', say official auditors | Technology sector | The Guardian](https://www.theguardian.com/business/2025/apr/28/eu-microchip-strategy-deeply-disconnected-from-reality-say-official-auditors), <https://www.theguardian.com/business/2025/apr/28/eu-microchip-strategy-deeply-disconnected-from-reality-say-official-auditors>

19. [Why is EU Parliament using a ‘bullshit generator’ AI for archive access?](https://euobserver.com/digital/are5b83cc3), <https://euobserver.com/digital/are5b83cc3>
20. [Leading UK tech investor warns of ‘disconcerting’ signs of AI stock bubble | Artificial intelligence \(AI\) | The Guardian](https://www.theguardian.com/technology/2025/oct/01/leading-uk-tech-investor-warns-of-disconcerting-signs-of-ai-stock-bubble), <https://www.theguardian.com/technology/2025/oct/01/leading-uk-tech-investor-warns-of-disconcerting-signs-of-ai-stock-bubble>; [Is the AI bubble about to burst – and send the stock market into freefall? | Phillip Inman | The Guardian](https://www.theguardian.com/technology/2025/aug/23/is-the-ai-bubble-about-to-burst-and-send-the-stock-market-into-freefall), <https://www.theguardian.com/technology/2025/aug/23/is-the-ai-bubble-about-to-burst-and-send-the-stock-market-into-freefall>; [The AI Boom Is Starting to Look a Lot Like the Dot-Com Burst, But Worse](https://www.vice.com/en/article/the-ai-boom-is-starting-to-look-a-lot-like-the-dot-com-burst-but-worse/?fbclid=IwQ0xD-SwLwgfZleHRuA2F1bQIxMQABHsSQ9A8m_tAT_SapIF1xkpLvWuLoiXOmdPTFV250Nw3ecZknyMrpu_J3MxS3_aem_bH377KfQULJMUDAgf5KbWw), [https://www.vice.com/en/article/the-ai-boom-is-starting-to-look-a-lot-like-the-dot-com-burst-but-worse/?fbclid=IwQ0xD-SwLwgfZleHRuA2F1bQIxMQABHsSQ9A8m\\_tAT\\_SapIF1xkpLvWuLoiXOmdPTFV250Nw3ecZknyMrpu\\_J3MxS3\\_aem\\_bH377KfQULJMUDAgf5KbWw](https://www.vice.com/en/article/the-ai-boom-is-starting-to-look-a-lot-like-the-dot-com-burst-but-worse/?fbclid=IwQ0xD-SwLwgfZleHRuA2F1bQIxMQABHsSQ9A8m_tAT_SapIF1xkpLvWuLoiXOmdPTFV250Nw3ecZknyMrpu_J3MxS3_aem_bH377KfQULJMUDAgf5KbWw); [The AI Backlash Keeps Growing Stronger | WIRED](https://www.wired.com/story/generative-ai-backlash/), <https://www.wired.com/story/generative-ai-backlash/>; [What happened to the artificial-intelligence revolution?](https://www.economist.com/finance-and-economics/2024/07/02/what-happened-to-the-artificial-intelligence-revolution), <https://www.economist.com/finance-and-economics/2024/07/02/what-happened-to-the-artificial-intelligence-revolution>
21. See footnote above and also see: Emily M Bender and Alex Hanna, *The AI Con*, (Bodley Head, 2025); Gary Smith, *The AI delusion*, (Oxford University Press, 2018); and [Artificial Intelligence: Perceptions and Reality - Accomplishments, Challenges, Prospects, and Risks | IIEA](https://www.iiea.com/events/artificial-intelligence-perceptions-and-reality-accomplishments-challenges-prospects-and-risks), <https://www.iiea.com/events/artificial-intelligence-perceptions-and-reality-accomplishments-challenges-prospects-and-risks>
22. See for example: Gary Marcus and Ernest Davis, *Rebooting AI: Building Artificial Intelligence We Can Trust*, (Pantheon, 2019)
23. [Apply AI Strategy | Shaping Europe’s digital future](https://digital-strategy.ec.europa.eu/en/policies/apply-ai), <https://digital-strategy.ec.europa.eu/en/policies/apply-ai>
24. See footnotes 20 and 21
25. For instance see the focus on chatbots, autonomous cars, immersive storytelling and large datasets in the Apply AI Strategy and AI Continent Action Plan. On chatbots see: [Why has customer service become so bad?](https://www.rte.ie/brainstorm/2022/1017/1329737-customer-service-apps-chatbots-complex-problems-eir-aer-lingus-banks/), <https://www.rte.ie/brainstorm/2022/1017/1329737-customer-service-apps-chatbots-complex-problems-eir-aer-lingus-banks/>; [NYC AI Chatbot Gives Faulty Legal Advice, Prompting Review](https://www.shrm.org/topics-tools/employment-law-compliance/nyc-ai-chatbot-faulty-legal-advice#:~:text=False%20Suggestions,refuses%20to%20cut%20their%20deadlocks), <https://www.shrm.org/topics-tools/employment-law-compliance/nyc-ai-chatbot-faulty-legal-advice#:~:text=False%20Suggestions,refuses%20to%20cut%20their%20deadlocks>. For the focus on autonomous cars see [Driverless cars were the future but now the truth is out: they’re on the road to nowhere | Christian Wolmar | The Guardian](https://www.theguardian.com/commentis-free/2023/dec/06/driverless-cars-future-vehicles-public-transport), <https://www.theguardian.com/commentis-free/2023/dec/06/driverless-cars-future-vehicles-public-transport>; Nicole Kobie, *The Long History of the Future: Why tomorrow’s technology still isn’t here*, (Bloomsbury Sigma, July 2024), p. 62 – 64
26. On the possible limitations of the current leading approaches, see: “Is AI Hitting A Wall?”, <https://www.ft.com/content/d01290c9-cc92-4c1f-bd70-ac332cd40f94> and also Gary Marcus and Ernest Davis, *Rebooting AI: Building Artificial Intelligence We Can Trust*
27. [A simpler Single Market to make companies choose Europe](https://ec.europa.eu/commission/presscorner/detail/en/ip_25_1274), [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_25\\_1274](https://ec.europa.eu/commission/presscorner/detail/en/ip_25_1274)
28. [A simpler Single Market to make companies choose Europe](https://ec.europa.eu/commission/presscorner/detail/en/ip_25_1274), [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_25\\_1274](https://ec.europa.eu/commission/presscorner/detail/en/ip_25_1274)
29. [The Single Market: our European home market in an uncertain world - Internal Market, Industry, Entrepreneurship and SMEs](https://single-market-economy.ec.europa.eu/publications/single-market-our-european-home-market-uncertain-world_en), [https://single-market-economy.ec.europa.eu/publications/single-market-our-european-home-market-uncertain-world\\_en](https://single-market-economy.ec.europa.eu/publications/single-market-our-european-home-market-uncertain-world_en)
30. [Single-Market Power: How Europe Surpassed America in the Quest for Economic Integration](https://www.foreignaffairs.com/europe/single-market-power-supassing-america?check_logged_in=1), [https://www.foreignaffairs.com/europe/single-market-power-supassing-america?check\\_logged\\_in=1](https://www.foreignaffairs.com/europe/single-market-power-supassing-america?check_logged_in=1)
31. [Interstate Trade Barriers And The Constitution](https://www.cato.org/sites/cato.org/files/serials/files/cato-journal/1987/1/cj6n3-6.pdf), <https://www.cato.org/sites/cato.org/files/serials/files/cato-journal/1987/1/cj6n3-6.pdf>
32. [Interstate Obstacles to Commerce | SpringerLink](https://link.springer.com/chapter/10.1007/978-1-4615-3128-9_11), [https://link.springer.com/chapter/10.1007/978-1-4615-3128-9\\_11](https://link.springer.com/chapter/10.1007/978-1-4615-3128-9_11); [Interstate Trade Barriers in the United States](https://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=2069&context=lcp), <https://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=2069&context=lcp>

33. [Which States Have Consumer Data Privacy Laws? - Bloomberg Law](https://pro.bloomberglaw.com/insights/privacy/state-privacy-legislation-tracker/#:~:text=Currently%2C%20there%20are%20%20states,data%20privacy%20laws%20in%20place.), <https://pro.bloomberglaw.com/insights/privacy/state-privacy-legislation-tracker/#:~:text=Currently%2C%20there%20are%20%20states,data%20privacy%20laws%20in%20place.>
34. [The Fragmentation of the Chinese Domestic Market](https://journals.openedition.org/chinaperspectives/410?lang=en), <https://journals.openedition.org/chinaperspectives/410?lang=en>; [China's Unification from Within: Dismantling Local Protectionism | New Perspectives on Asia | CSIS](https://www.csis.org/blogs/new-perspectives-asia/chinas-unification-within-dismantling-local-protectionism), <https://www.csis.org/blogs/new-perspectives-asia/chinas-unification-within-dismantling-local-protectionism>
35. [China's Unification from Within: Dismantling Local Protectionism | New Perspectives on Asia | CSIS](https://www.csis.org/blogs/new-perspectives-asia/chinas-unification-within-dismantling-local-protectionism), <https://www.csis.org/blogs/new-perspectives-asia/chinas-unification-within-dismantling-local-protectionism>
36. [China's "National Unified Market" Initiative: 2025 Update](https://www.china-briefing.com/news/chinas-national-unified-market-initiative-2025-update/), <https://www.china-briefing.com/news/chinas-national-unified-market-initiative-2025-update/>
37. [China's Unification from Within: Dismantling Local Protectionism | New Perspectives on Asia | CSIS](https://www.csis.org/blogs/new-perspectives-asia/chinas-unification-within-dismantling-local-protectionism), <https://www.csis.org/blogs/new-perspectives-asia/chinas-unification-within-dismantling-local-protectionism>
38. [Comparing the development of free movement and social citizenship for internal migrants in the European Union and China – converging trends?: Citizenship Studies: Vol 16 , No 3-4 - Get Access](https://www.tandfonline.com/doi/full/10.1080/13621025.2012.683266), <https://www.tandfonline.com/doi/full/10.1080/13621025.2012.683266>
39. ['If hukou is abolished now, everyone will swarm into cities': The system that ties Chinese citizens to one place – The Irish Times](https://www.irishtimes.com/world/asia-pacific/2023/02/10/denis-staunton-abolishing-chinas-hukou-system-might-not-be-the-right-move/), <https://www.irishtimes.com/world/asia-pacific/2023/02/10/denis-staunton-abolishing-chinas-hukou-system-might-not-be-the-right-move/>; [China's Hukou Reform in 2022: Do They Mean it this Time? | New Perspectives on Asia | CSIS](https://www.csis.org/blogs/new-perspectives-asia/chinas-hukou-reform-2022-do-they-mean-it-time-0), <https://www.csis.org/blogs/new-perspectives-asia/chinas-hukou-reform-2022-do-they-mean-it-time-0>; [Is China finally getting serious about hukou reform? | Lowy Institute](https://www.lowyinstitute.org/the-interpreter/china-finally-getting-serious-about-hukou-reform), <https://www.lowyinstitute.org/the-interpreter/china-finally-getting-serious-about-hukou-reform>
40. [Japan used to be a tech leader. Here's how it can regain global standing | World Economic Forum](https://www.weforum.org/stories/2025/03/japan-technology-innovation-governance/), <https://www.weforum.org/stories/2025/03/japan-technology-innovation-governance/>; ["In contrast to Japan, the EU is struggling to develop a tech vision" | Sifted](https://sifted.eu/articles/europe-can-learn-from-japans-society-5-0), <https://sifted.eu/articles/europe-can-learn-from-japans-society-5-0>; [Japanese Technology: How it shaped the world | Japan Dev](https://japan-dev.com/blog/the-history-and-future-of-technological-innovation-in-japan), <https://japan-dev.com/blog/the-history-and-future-of-technological-innovation-in-japan>
41. [South Korea Versus Japan: What Can the EU Learn From the Two Countries? |](https://ecipe.org/blog/south-korea-japan-what-can-eu-learn/), <https://ecipe.org/blog/south-korea-japan-what-can-eu-learn/>
42. [Taiwan's digital economy reaches NT\\$1 trillion milestone, says Digital Affairs Minister](https://www.digitimes.com/news/a20250604PD201/taiwan-modern-digital-economy-cybersecurity.html), <https://www.digitimes.com/news/a20250604PD201/taiwan-modern-digital-economy-cybersecurity.html>; [Taiwan - Digital Economy](https://www.trade.gov/country-commercial-guides/taiwan-digital-economy), <https://www.trade.gov/country-commercial-guides/taiwan-digital-economy>
43. [20241111-WCC-Digital-Report-2024-WIP.pdf](https://imd.widen.net/s/xvhldkrrkw/20241111-wcc-digital-report-2024-wip), <https://imd.widen.net/s/xvhldkrrkw/20241111-wcc-digital-report-2024-wip>
44. [20241111-WCC-Digital-Report-2024-WIP.pdf](https://imd.widen.net/s/xvhldkrrkw/20241111-wcc-digital-report-2024-wip), <https://imd.widen.net/s/xvhldkrrkw/20241111-wcc-digital-report-2024-wip>
45. [Global Innovation Index 2024 - GII 2024 results](https://www.wipo.int/web-publications/global-innovation-index-2024/en/gii-2024-results.html), <https://www.wipo.int/web-publications/global-innovation-index-2024/en/gii-2024-results.html>
46. [California's strict regulations don't stop at the state border : The Indicator from Planet Money : NPR](https://www.npr.org/transcripts/1121353515), <https://www.npr.org/transcripts/1121353515>
47. [Policy Experimentation in China: the Political Economy of Policy Learning](https://www.nber.org/system/files/working_papers/w29402/w29402.pdf), [https://www.nber.org/system/files/working\\_papers/w29402/w29402.pdf](https://www.nber.org/system/files/working_papers/w29402/w29402.pdf)
48. [Explaining Reform and Special Economic Zones in China | The Oxford Handbook of Industrial Hubs and Economic Development | Oxford Academic](https://academic.oup.com/edited-volume/40436/chapter-abstract/347486170?redirectedFrom=fulltext), <https://academic.oup.com/edited-volume/40436/chapter-abstract/347486170?redirectedFrom=fulltext>

49. [The Secret Document That Transformed China : Planet Money : NPR](https://www.npr.org/sections/mon-ey/2012/01/20/145360447/the-secret-document-that-transformed-china), <https://www.npr.org/sections/mon-ey/2012/01/20/145360447/the-secret-document-that-transformed-china>
50. [Explaining Reform and Special Economic Zones in China | The Oxford Handbook of Industrial Hubs and Economic Development | Oxford Academic](https://academic.oup.com/edited-volume/40436/chapter-abstract/347486170?re-directedFrom=fulltext), <https://academic.oup.com/edited-volume/40436/chapter-abstract/347486170?re-directedFrom=fulltext>
51. [Learning from Difference: The New Architecture of Experimentalist Governance in the EU - Sabel - 2008 - European Law Journal - Wiley Online Library](https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1468-0386.2008.00415.x?msocid=0e6ec124b53f654c3342d1fcb4946448), <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1468-0386.2008.00415.x?msocid=0e6ec124b53f654c3342d1fcb4946448>
52. [Improving Regulation-Making Insights from Digital Policy.pdf](https://www.iiea.com/images/uploads/resources/Improving_Regulation-Making_Insights_from_Digital_Policy.pdf), [https://www.iiea.com/images/uploads/resources/Improving\\_Regulation-Making\\_Insights\\_from\\_Digital\\_Policy.pdf](https://www.iiea.com/images/uploads/resources/Improving_Regulation-Making_Insights_from_Digital_Policy.pdf), p. 14
53. [Only 26% of SMEs export according to the Annual Single Market Report 2023](https://single-market-economy.ec.europa.eu/system/files/2023-01/ASMR%202023.pdf), <https://single-market-economy.ec.europa.eu/system/files/2023-01/ASMR%202023.pdf>
54. [Why Ireland is the Achilles Heel of the EU's fightback against Big Tech](https://euobserver.com/digital/arfd2322c4;Dodging_the_one-stop_shop_|_IAPP), [https://euobserver.com/digital/arfd2322c4;Dodging\\_the\\_one-stop\\_shop\\_|\\_IAPP](https://euobserver.com/digital/arfd2322c4;Dodging_the_one-stop_shop_|_IAPP), <https://iapp.org/news/a/dodging-the-one-stop-shop>; [Why Ireland is the Achilles Heel of the EU's fightback against Big Tech](https://euobserver.com/digital/arfd2322c4), <https://euobserver.com/digital/arfd2322c4>
55. [Electoral disinformation powers unlikely to be in place for presidential election](https://www.irishtimes.com/news/arid-41694302.html), <https://www.irishtimes.com/news/arid-41694302.html>
56. [China put pressure on EU to soften coronavirus disinformation report - POLITICO](https://www.politico.com/news/2020/04/25/china-put-pressure-on-eu-to-soften-coronavirus-disinformation-report-207797), <https://www.politico.com/news/2020/04/25/china-put-pressure-on-eu-to-soften-coronavirus-disinformation-report-207797>
57. [E.U. Delays Digital Levy as Tax Talks Proceed - The New York Times](https://www.nytimes.com/2021/07/12/us/politics/eu-digital-tax.html), <https://www.nytimes.com/2021/07/12/us/politics/eu-digital-tax.html>
58. [For example see, \[How EU Over Regulation Is Stifling Business Growth and Innovation\]\(https://about.fb.com/news/2025/08/how-eu-over-regulation-is-stifling-business-growth-and-innovation/\)](https://about.fb.com/news/2025/08/how-eu-over-regulation-is-stifling-business-growth-and-innovation/), <https://about.fb.com/news/2025/08/how-eu-over-regulation-is-stifling-business-growth-and-innovation/>
59. [China's digital policy: a threat to European business models - Institut der deutschen Wirtschaft \(IW\)](https://www.iwkoeln.de/studien/vera-demary-juergen-matthes-chinas-digital-policy-a-threat-to-european-business-models.html), <https://www.iwkoeln.de/studien/vera-demary-juergen-matthes-chinas-digital-policy-a-threat-to-european-business-models.html>
60. [Data portability in the EU: An obscure data subject right | IAPP](https://iapp.org/news/a/data-portability-in-the-eu-an-obscure-data-subject-right), <https://iapp.org/news/a/data-portability-in-the-eu-an-obscure-data-subject-right>
61. [AI Liability | Mason Hayes Curran](https://www.mhc.ie/latest/insights/ai-liability), <https://www.mhc.ie/latest/insights/ai-liability>
62. [AI Liability Directive: Why the EU needs it | Simmons & Simmons](https://www.simmons-simmons.com/en/publications/cmc3feh4f00c8uwr4lyag1yrt/ai-liability-directive-why-the-eu-needs-it), <https://www.simmons-simmons.com/en/publications/cmc3feh4f00c8uwr4lyag1yrt/ai-liability-directive-why-the-eu-needs-it>; [AI Liability | Mason Hayes Curran](https://www.mhc.ie/latest/insights/ai-liability), <https://www.mhc.ie/latest/insights/ai-liability>
63. [How can the Digital Markets Act enhance digital innovation?](https://www.bruegel.org/newsletter/how-can-digital-markets-act-enhance-digital-innovation), <https://www.bruegel.org/newsletter/how-can-digital-markets-act-enhance-digital-innovation>; [SCOTT-MORTON Monograph.indd](https://som.yale.edu/sites/default/files/2025-05/SCOTT-MORTON_Digital_Platform_Regulation_pages.pdf#page=14), [https://som.yale.edu/sites/default/files/2025-05/SCOTT-MORTON\\_Digital\\_Platform\\_Regulation\\_pages.pdf#page=14](https://som.yale.edu/sites/default/files/2025-05/SCOTT-MORTON_Digital_Platform_Regulation_pages.pdf#page=14), p. 15 – 60;
64. [Why the EU Data Act is an opportunity, not a burden | Thoughtworks](https://www.thoughtworks.com/insights/blog/data-strategy/eu-data-act), <https://www.thoughtworks.com/insights/blog/data-strategy/eu-data-act>
65. [Financial regulation has proved its worth in the turbulence of recent years – Bank of Finland Bulletin](https://www.bofbulletin.fi/en/2024/2/financial-regulation-has-proved-its-worth-in-the-turbulence-of-recent-years/), <https://www.bofbulletin.fi/en/2024/2/financial-regulation-has-proved-its-worth-in-the-turbulence-of-recent-years/>
66. [In the Trump era, Europe should shift its gaze towards China – Joseph Stiglitz – The Irish Times](https://www.irishtimes.com/business/2025/03/21/in-the-trump-era-europe-should-shift-its-gaze-towards-china-joseph-stiglitz/), <https://www.irishtimes.com/business/2025/03/21/in-the-trump-era-europe-should-shift-its-gaze-towards-china-joseph-stiglitz/>

67. 'The Great Reversal' Review: When Bigger Is Not Better | Hudson Institute, <https://www.hudson.org/economics/the-great-reversal-review-when-bigger-is-not-better>; EU competition policy should not be sacrificed but trade policy should be strengthened | CEPR, <https://cepr.org/voxeu/columns/eu-competition-policy-should-not-be-sacrificed-trade-policy-should-be-strengthened>
68. The Nokia Risk | Phenomenal World, <https://www.phenomenalworld.org/analysis/nokia-risk/>; The Unbearable Riskiness of Concentration: Big firms in small Nordic Countries, <https://nordics.info/show/artikel/the-unbearable-riskiness-of-concentration-big-firms-in-small-nordic-countries>; With Novo Nordisk success, is there a "Nokia risk" for Denmark? - CBS News, <https://www.cbsnews.com/news/with-novo-nordisk-success-is-there-a-nokia-risk-for-denmark-60-minutes/>; Novo faces 'Nokia risk' as it fights Lilly's homecourt advantage | Insights | Bloomberg Professional Services, <https://www.bloomberg.com/professional/insights/markets/novo-faces-nokia-risk-as-it-fights-lillys-home-court-advantage/>
69. See Op-ed by Commission President von der Leyen, [https://ec.europa.eu/commission/presscorner/detail/en/ac\\_20\\_260](https://ec.europa.eu/commission/presscorner/detail/en/ac_20_260) and also the assessment in the paper [European Sovereignty in the Digital Age.pdf](https://www.iiea.com/images/uploads/resources/European_Sovereignty_in_the_Digital_Age.pdf), [https://www.iiea.com/images/uploads/resources/European\\_Sovereignty\\_in\\_the\\_Digital\\_Age.pdf](https://www.iiea.com/images/uploads/resources/European_Sovereignty_in_the_Digital_Age.pdf)
70. Fact Sheet: What We Know about Russia's Interference Operations | German Marshall Fund of the United States, <https://www.gmfus.org/news/fact-sheet-what-we-know-about-russias-interference-operations>; US accuses Russia of interfering with presidential election, <https://www.bbc.com/news/articles/c8rx28v1vpro>
71. <https://www.vox.com/future-perfect/2019/8/22/20826971/facebook-twitter-china-misinformation-ughur-muslim-internment-camps>, <https://www.vox.com/future-perfect/2019/8/22/20826971/facebook-twitter-china-misinformation-ughur-muslim-internment-camps>
72. Elon Musk has turned X into a globally influential media platform – and there's more to come, <https://theconversation.com/elon-musk-has-turned-x-into-a-globally-influential-media-platform-and-theres-more-to-come-243377>
73. What is Cambridge Analytica? The firm at the centre of Facebook's data breach | Cambridge Analytica | The Guardian, <https://www.theguardian.com/news/2018/mar/18/what-is-cambridge-analytica-firm-at-centre-of-facebook-data-breach>; How Europe became the Wild West of spyware – POLITICO, <https://www.politico.eu/article/how-europe-became-wild-west-spyware/>
74. EU Commission urged to act over Elon Musk's 'interference' in elections | European Union | The Guardian, <https://www.theguardian.com/world/2025/jan/08/eu-commission-urged-to-act-elon-musk-interference-elections>
75. See discussion in [The Geopolitics of Privacy Policy Lessons and Implications for the EU.pdf](https://www.iiea.com/images/uploads/resources/The_Geopolitics_of_Privacy_Policy_Lessons_and_Implications_for_the_EU.pdf), [https://www.iiea.com/images/uploads/resources/The\\_Geopolitics\\_of\\_Privacy\\_Policy\\_Lessons\\_and\\_Implications\\_for\\_the\\_EU.pdf](https://www.iiea.com/images/uploads/resources/The_Geopolitics_of_Privacy_Policy_Lessons_and_Implications_for_the_EU.pdf)
76. [cepStudy\\_Digital\\_Services\\_European\\_Solutions\\_for\\_Fair\\_Taxation\\_of\\_Multinational\\_Digital\\_Service\\_Providers.pdf](https://www.cep.eu/fileadmin/user_upload/cep.eu/Studien/cepStudie_Digitale_Dienstleistungen/cepStudy_Digital_Services_European_Solutions_for_Fair_Taxation_of_Multinational_Digital_Service_Providers.pdf), [https://www.cep.eu/fileadmin/user\\_upload/cep.eu/Studien/cepStudie\\_Digitale\\_Dienstleistungen/cepStudy\\_Digital\\_Services\\_European\\_Solutions\\_for\\_Fair\\_Taxation\\_of\\_Multinational\\_Digital\\_Service\\_Providers.pdf](https://www.cep.eu/fileadmin/user_upload/cep.eu/Studien/cepStudie_Digitale_Dienstleistungen/cepStudy_Digital_Services_European_Solutions_for_Fair_Taxation_of_Multinational_Digital_Service_Providers.pdf); Digital borders and beyond: Establishing normative grounds for cybersecurity and sovereignty in international law - ScienceDirect, <https://www.sciencedirect.com/science/article/abs/pii/S2212473X25000537>
77. Trump threatens 'substantial' new tariffs against countries with 'discriminatory' digital rules – POLITICO, <https://www.politico.eu/article/us-question-report-sanction-eu-officials-dsa-donald-trump/>
78. Elon Musk has turned X into a globally influential media platform – and there's more to come, <https://theconversation.com/elon-musk-has-turned-x-into-a-globally-influential-media-platform-and-theres-more-to-come-243377>; Elon Musk's influence on X boosts far-right European figures | AP News, <https://apnews.com/article/musk-europe-politicians-influence-x-twitter-extremists-89746e1e17bcc134206c14a204efcbce>; EU Commission urged to act over Elon Musk's 'interference' in elections | European Union | The Guardian,
79. Trump is waging culture war on Europe by promoting rightwing allies, report finds | European Union | The Guardian, <https://www.theguardian.com/world/2025/sep/23/trump-culture-war-europe-promoting-rightwing-allies-report-finds>; Trump is working on regime change in Europe — fact, not conspiracy theory, <https://euobserver.com/eu-and-the-world/ar0ec480cc>

80. [Why the EU has no choice but to respond to Donald Trump's bullying on tech regulation with a coercion investigation](https://theconversation.com/why-the-eu-has-no-choice-but-to-respond-to-donald-trumps-bullying-on-tech-regulation-with-a-coercion-investigation-265618), <https://theconversation.com/why-the-eu-has-no-choice-but-to-respond-to-donald-trumps-bullying-on-tech-regulation-with-a-coercion-investigation-265618>; [EU stands its ground on digital rules despite Trump warning – The Irish Times](https://www.irishtimes.com/business/2025/08/26/eu-stands-its-ground-on-digital-rules-despite-trump-warning/), <https://www.irishtimes.com/business/2025/08/26/eu-stands-its-ground-on-digital-rules-despite-trump-warning/>
81. [Trump threatens 'substantial' new tariffs against countries with 'discriminatory' digital rules – POLITICO](https://www.politico.eu/article/us-question-report-sanction-eu-officials-dsa-donald-trump/), <https://www.politico.eu/article/us-question-report-sanction-eu-officials-dsa-donald-trump/>
82. [Exclusive: Trump administration weighs sanctions on officials implementing EU tech law, sources say | Reuters](https://www.reuters.com/world/us/trump-administration-weighs-sanctions-officials-implementing-eu-tech-law-sources-2025-08-26/), <https://www.reuters.com/world/us/trump-administration-weighs-sanctions-officials-implementing-eu-tech-law-sources-2025-08-26/>
83. [TikTok Ban Is Also About Hiding Pro-Palestinian Content](https://theintercept.com/2025/01/09/tiktok-ban-israel-palestine-republicans/), <https://theintercept.com/2025/01/09/tiktok-ban-israel-palestine-republicans/>; [Trump quips he'd make TikTok algorithm '100% MAGA' as he signs order for China sale to US group | The Independent](https://www.independent.co.uk/news/world/americas/us-politics/tiktok-deal-trump-china-announcement-b2833916.html), <https://www.independent.co.uk/news/world/americas/us-politics/tiktok-deal-trump-china-announcement-b2833916.html>; [The TikTok deal puts even more media in the hands of the super-rich | Margaret Sullivan | The Guardian](https://www.theguardian.com/commentisfree/2025/sep/26/tiktok-deal-china-us-super-rich), <https://www.theguardian.com/commentisfree/2025/sep/26/tiktok-deal-china-us-super-rich>; [Peter Navarro calls on Musk to cleanse 'cesspool' on X and ban anonymous users from the site | The Independent](https://www.independent.co.uk/news/world/americas/us-politics/peter-navarro-x-elon-musk-cleanup-b2827472.html), <https://www.independent.co.uk/news/world/americas/us-politics/peter-navarro-x-elon-musk-cleanup-b2827472.html>; [New US directive for visa applicants turns social media feeds into political documents](https://theconversation.com/new-us-directive-for-visa-applicants-turns-social-media-feeds-into-political-documents-260201), <https://theconversation.com/new-us-directive-for-visa-applicants-turns-social-media-feeds-into-political-documents-260201>
84. [Microsoft's email shutdown of ICC prosecutor fuels EU fears of US tech blackmail | Euractiv](https://www.euractiv.com/news/microsofts-email-shutdown-of-icc-prosecutor-fuels-eu-fears-of-us-tech-blackmail/), <https://www.euractiv.com/news/microsofts-email-shutdown-of-icc-prosecutor-fuels-eu-fears-of-us-tech-blackmail/>; ['Kill Switch Shield' and the Recurring Erosion of Trust in US Tech | TechPolicy.Press](https://www.techpolicy.press/kill-switch-shield-and-the-recurring-erosion-of-trust-in-us-tech/), <https://www.techpolicy.press/kill-switch-shield-and-the-recurring-erosion-of-trust-in-us-tech/>; [Microsoft didn't cut services to International Criminal Court, its president says – POLITICO](https://www.politico.eu/article/microsoft-did-not-cut-services-international-criminal-court-president-american-sanctions-trump-tech-icc-amazon-google/), <https://www.politico.eu/article/microsoft-did-not-cut-services-international-criminal-court-president-american-sanctions-trump-tech-icc-amazon-google/>; ['Kill Switch Shield' and the Recurring Erosion of Trust in US Tech | TechPolicy.Press](https://www.techpolicy.press/kill-switch-shield-and-the-recurring-erosion-of-trust-in-us-tech/), <https://www.techpolicy.press/kill-switch-shield-and-the-recurring-erosion-of-trust-in-us-tech/>
85. [Microsoft's email shutdown of ICC prosecutor fuels EU fears of US tech blackmail | Euractiv](https://www.euractiv.com/news/microsofts-email-shutdown-of-icc-prosecutor-fuels-eu-fears-of-us-tech-blackmail/), <https://www.euractiv.com/news/microsofts-email-shutdown-of-icc-prosecutor-fuels-eu-fears-of-us-tech-blackmail/>; [Microsoft didn't cut services to International Criminal Court, its president says – POLITICO](https://www.politico.eu/article/microsoft-did-not-cut-services-international-criminal-court-president-american-sanctions-trump-tech-icc-amazon-google/), <https://www.politico.eu/article/microsoft-did-not-cut-services-international-criminal-court-president-american-sanctions-trump-tech-icc-amazon-google/>; ['Kill Switch Shield' and the Recurring Erosion of Trust in US Tech | TechPolicy.Press](https://www.techpolicy.press/kill-switch-shield-and-the-recurring-erosion-of-trust-in-us-tech/), <https://www.techpolicy.press/kill-switch-shield-and-the-recurring-erosion-of-trust-in-us-tech/>;
86. [What the EU Needs to do to Challenge Big Tech Cloud Dominance | TechPolicy.Press](https://www.techpolicy.press/what-the-eu-needs-to-do-to-challenge-big-tech-cloud-dominance/), <https://www.techpolicy.press/what-the-eu-needs-to-do-to-challenge-big-tech-cloud-dominance/>;
87. [EXCLUSIVE: EU digital chief says no need to be 'provocative' in face of US attacks | Euractiv](https://www.euractiv.com/news/exclusive-eu-digital-chief-says-no-need-to-be-provocative-in-face-of-us-attacks/), <https://www.euractiv.com/news/exclusive-eu-digital-chief-says-no-need-to-be-provocative-in-face-of-us-attacks/>
88. [An EU initiative on virtual worlds: a head start in the next technological transition | Shaping Europe's digital future](https://digital-strategy.ec.europa.eu/en/library/eu-initiative-virtual-worlds-head-start-next-technological-transition), <https://digital-strategy.ec.europa.eu/en/library/eu-initiative-virtual-worlds-head-start-next-technological-transition>
89. [Towards Sovereignty in AI: A 7-Tier Strategy for Europe's Technological Independence in Generative Artificial Intelligence | Futurium](https://futurium.ec.europa.eu/cs/european-ai-alliance/community-content/towards-sovereignty-ai-7-tier-strategy-europes-technological-independence-generative-artificial), <https://futurium.ec.europa.eu/cs/european-ai-alliance/community-content/towards-sovereignty-ai-7-tier-strategy-europes-technological-independence-generative-artificial>
90. [EUR-Lex - 52025DC0723 - EN - EUR-Lex](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX-52025DC0723), <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX-52025DC0723>
91. [The EU sets out plan to build 20pc of the world's semiconductors](https://www.siliconrepublic.com/machines/semiconductors-manufacturing-eu-2030), <https://www.siliconrepublic.com/machines/semiconductors-manufacturing-eu-2030>

92. [Japan's Top Social Media Platforms for 2025 - 10th Edition - Humble Bunny](https://www.humblebunny.com/japan-top-social-media-networks/), <https://www.humblebunny.com/japan-top-social-media-networks/>
93. [Social Media in South Korea 2025 - InterAd](https://www.interad.com/en/insights/social-media-korea), <https://www.interad.com/en/insights/social-media-korea>; [Korean Search Engine Market Share 2025 | InterAd](https://www.interad.com/en/insights/korean-search-engine-market-share), <https://www.interad.com/en/insights/korean-search-engine-market-share>
94. [This Czech search engine was beating Google until recently. It says Google isn't playing fair](https://qz.com/1752541/czech-search-engine-seznam-beat-google-until-android-came-along), <https://qz.com/1752541/czech-search-engine-seznam-beat-google-until-android-came-along>; [Bol still biggest online seller in Dutch ecommerce](https://ecommercenews.eu/bol-still-biggest-online-seller-in-dutch-ecommerce/), <https://ecommercenews.eu/bol-still-biggest-online-seller-in-dutch-ecommerce/>
95. [At the Sovereignty Summit, Europe Put Start-Ups on Stage and Kept Big Tech in Control | TechPolicy.Press](https://www.techpolicy.press/at-the-sovereignty-summit-europe-put-startups-on-stage-and-kept-big-tech-in-control/), <https://www.techpolicy.press/at-the-sovereignty-summit-europe-put-startups-on-stage-and-kept-big-tech-in-control/>
96. [Vienna Declaration 2022](https://assets.innovazione.gov.it/1763560898-declaration_on_digital_sovereignty.pdf), [https://assets.innovazione.gov.it/1763560898-declaration\\_on\\_digital\\_sovereignty.pdf](https://assets.innovazione.gov.it/1763560898-declaration_on_digital_sovereignty.pdf)
97. [Vienna Declaration 2022](https://assets.innovazione.gov.it/1763560898-declaration_on_digital_sovereignty.pdf), [https://assets.innovazione.gov.it/1763560898-declaration\\_on\\_digital\\_sovereignty.pdf](https://assets.innovazione.gov.it/1763560898-declaration_on_digital_sovereignty.pdf)
98. [Vienna Declaration 2022](https://assets.innovazione.gov.it/1763560898-declaration_on_digital_sovereignty.pdf), [https://assets.innovazione.gov.it/1763560898-declaration\\_on\\_digital\\_sovereignty.pdf](https://assets.innovazione.gov.it/1763560898-declaration_on_digital_sovereignty.pdf)
99. [What is Cambridge Analytica? The firm at the centre of Facebook's data breach | Cambridge Analytica | The Guardian](https://www.theguardian.com/technology/2018/jun/07/cambridge-analytica-what-is-it); [How Europe became the Wild West of spyware – POLITICO](https://www.politico.eu/article/how-europe-became-wild-west-spyware/), <https://www.politico.eu/article/how-europe-became-wild-west-spyware/>
100. [For the EU's digital partnership agreements with Japan and South Korea: Digital partnerships | Shaping Europe's digital future](https://digital-strategy.ec.europa.eu/en/policies/partnerships), <https://digital-strategy.ec.europa.eu/en/policies/partnerships>; [For Taiwan see: The European Union and Taiwan | EEAS](https://www.eeas.europa.eu/delegations/taiwan/european-union-and-taiwan_en?s=242), [https://www.eeas.europa.eu/delegations/taiwan/european-union-and-taiwan\\_en?s=242](https://www.eeas.europa.eu/delegations/taiwan/european-union-and-taiwan_en?s=242); [The 2nd Taiwan-EU Dialogue on Digital Economy \(DDE\) Successfully Concluded; Taiwan-EU Cooperation Moving Forward toward a New Frontier](https://www.ndc.gov.tw/en/nc_8455_34617), [https://www.ndc.gov.tw/en/nc\\_8455\\_34617](https://www.ndc.gov.tw/en/nc_8455_34617)

The Institute of International and European Affairs (IIEA) is Ireland's leading international affairs think tank. Founded in 1991, its mission is to foster and shape political, policy and public discourse, in order to broaden awareness of international and European issues in Ireland and contribute to more informed strategic decisions by political, business and civil society leaders.

The IIEA acts as a forum for informed debate, analysis and discussion. Views expressed in the Institute's publications, and in presentations at its events, are those of the authors alone and do not represent the views of the Institute, which is fully independent. The IIEA is a not-for profit organisation with charitable status.

© Institute of International and European Affairs, November 2025

Creative Commons License

This is a human-readable summary of (and not a substitute for) the license.

<https://creativecommons.org/licenses/Attribution-NonCommercial-ShareAlike/4.0/> 4.0 International (CC BY-NC-SA 4.0)

You are free to:

- Share - copy and redistribute the material in any medium or format
- Adapt - remix, transform, and build upon the material
- The licensor cannot revoke these freedoms as long as you follow the license terms.

Under the following terms:

**Attribution** — You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

**NonCommercial** — You may not use the material for commercial purposes.

**ShareAlike** — If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original.

**No additional restrictions** — You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.



The IIEA acknowledges the support of the Citizens, Equality, Rights and Values (CERV) Programme of the European Union



**The Institute of International and European Affairs,**

8 North Great Georges Street, Dublin 1, Ireland

T: +353-1-8746756 F: +353-1-8786880

E: [reception@iiea.com](mailto:reception@iiea.com) W: [www.iiea.com](http://www.iiea.com)