LEGAL OPINION

ON THE ELIGIBILITY OF DATA CENTRES UNDER THE CLEAN INDUSTRIAL DEAL STATE AID FRAMEWORK

ON BEHALF OF

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Table of contents

A. Executive Summary

I.

Electricity price relief as a state aid instrument

The Commission intends to make use of temporary electricity price relief as a state aid instrument to mitigate negative effects of European climate protection measures on the EU's attractiveness as a business location. In its Communication on the State Aid Framework for the Clean Industry Deal (hereinafter "CISAF Communication"), the Commission addresses, among other things, the specific risk of energy-intensive companies relocating outside Europe due to high electricity prices within the EU.

Electricity price relief for data centres constitutes State aid within the meaning of Article 107(1) TFEU, for which justification under Article 107(3)(c) TFEU may be considered. The Commission's discretion under primary law is framed by the CISAF Communication, according to which the Commission *"will consider compatible with the internal market on the basis of Article 107(3), point (c), of the Treaty, aid in the form of temporary electricity price relief for activities that operate in sectors for which these risks are particularly elevated."*

The economic sectors eligible for temporary electricity price relief are determined by reference to the list in Annex 1 to the Guidelines on State Aid for Climate, Environmental Protection and Energy Aid (hereinafter referred to as the "CEEAG " or "CEEAG Communication"). However, only companies in the economic sectors listed there *"for which the multiplication of their trade intensity and electro-intensity at Union level reaches at least 2 % percent and whose trade intensity and electro-intensity at Union level is at least 5 % for each indicator."* In order to receive support in the form of temporary electricity price relief, the economic sector to be supported must, in principle, be included in Section 1 of the CEEAG. Data centres are not explicitly listed as an eligible economic sector. However, a functional interpretation of the list informed by the principle of effectiveness may support their inclusion.

II.

Industrial control through data centres

Even where their services are sourced externally, data centres are fully integrated into modern industrial companies, both virtually and in terms of value creation. They are therefore indispensable to the competitive business activities of companies in the economic sectors listed in the CEEAG. They control highly complex manufacturing processes and, through automation, enable gains in efficiency and accuracy that would not otherwise be possible. As such, data centres contribute significantly to the value added of the industries that depend on them. Accordingly, coherent support for the listed economic sectors must also extend to data centres. This is further indicated by the fact that, despite their high electricity consumption, data centres were not considered by the Commission to be a separate economic sector when drawing up the list.

III.

Latency, security and geopolitical risks

The use of data centres operated in third countries poses considerable challenges for European industrial companies and exposes them to serious risks. Increased latency resulting from geographical distance can significantly jeopardise the stability and quality of production processes. The routing of data through non-European network nodes exposes companies to heightened cybersecurity and data loss risks. Moreover, geopolitical dependence on third countries not only renders the availability of data centres uncertain but may also result in the loss of effective jurisdictional oversight. Accordingly, failure to promote data centres would jeopardise not only the objective of preventing the relocation of listed industrial companies, but also other key EU policy objectives.

IV.

Law enforcement deficits in third countries

European data protection and security legislation also applies to data processing carried out by data centres located in third countries. However, the effective enforcement of European legal standards in third countries cannot be reliably ensured. As a result, EU law risks being deprived of its practical effectiveness in this area. The risk that EU data protection and security rules may be de facto undermined therefore requires, in line with Union objectives, the inclusion of data centres among the listed economic sectors.

V.

Positive spillover effects

A temporary electricity price relief for data centres would enhance the value-added effect of their upstream support, while generating fewer distortions of competition in the downstream markets of the listed economic sectors. In addition, this positive spillover effect would be amplified over time in light of observed growth trends across a broad range of industrial sectors and their value chains supported by data centres. This is consistent with the principles of regulatory economics (particularly in network industries), according to which government intervention should be applied at the upstream market level wherever possible in order to maximise value creation in downstream markets while minimising distortions of competition.

VI.

Counterbalancing lower investment relocation costs

Compared to the companies in the list of energy-intensive industries, data centres are often less dependent on traditional industrial location factors such as raw material supply or integration into local production clusters when choosing their location. Data centres do have relevant location constraints, particularly in terms of power grid and fibre optic connectivity requirements, low latency to end users and data hubs, space availability, and permitting and implementation

requirements. Nevertheless, in practice, the location decision for data centres are primarily driven by ongoing energy costs, as the price of electricity represents one of the largest operating cost blocks and directly determines the economic viability of new capacities in international competition.

Against this backdrop, data centres can be expected to be at least as sensitive to electricity prices, and in some cases even more so. This increases the risk that investments in new data centre capacity (new locations and expansions) may be relocated to third countries where electricity costs are more competitive if no relief is provided. Compared to the companies listed, data centres are therefore at even greater risk of relocation if they are not included in the list of eligible recipients. In the interests of a coherent funding policy, it is therefore appropriate to extend eligibility for support to data centres.

VII.

Cost-effective incentives in line with EU objectives

The logic of the incentive effect under state aid law makes it particularly appropriate to include data centres in the CEEAG. Only by including data centres in the funding scheme can corporate behaviour be effectively influenced in a manner that supports the EU objective of preventing relocation to third countries with lower environmental standards, taking into account opportunity and transaction cost considerations. Otherwise, the Commission would risk creating a misguided incentive whereby listed companies that are unable to operate their own fully-fledged, high-performance data centres in a cost-efficient manner would be driven to resort to external data centres located outside Europe. Such an outcome, in light of the serious adverse effects and significant security risks outlined above, would not be consistent with the Union's objectives. The overarching objective of the European Green Deal is to ensure that data centres are operated using renewable energy in the long term and integrated into sustainable energy systems (e.g. waste heat recovery systems). However, the sustainability of data centre operations cannot be effectively shaped if such facilities are relocated outside Europe.

VIII.

Compensating for structural barriers to investment and counteracting industrial relocation following data centres (adhesion migration)

In order to compensate for structural barriers to investment in the EU arising from comparatively high electricity and labour costs relative to third countries, and given the capital-intensive nature of investments in data centres – which, however, operate at lower marginal costs once the initial investment has been made – it is appropriate to include them among the listed economic sectors. Otherwise, there is a risk not only of the relocation of data centre investments themselves, but also of what may be described as "adhesion migration", that is, the relocation of eligible industries following data centres due to insufficient server capacity within the EU and the stringent latency requirements of modern production facilities, which may only be effectively met in third countries offering locational advantages for data centres. Data centres are, in effect, a functional prerequisite for fully integrated supply chains in modern industries (including high-tech manufacturing, IT, robotics and AI). They therefore constitute core infrastructural inputs embedded as essential processes within modern value chains.

IX.

There is currently an acute need for funding, taking a forward-looking perspective on future time- and capital-critical investment and modernisation cycles for data centres

The Commission should swiftly include data centres in the CEEAG in order to prevent, by means of temporary electricity price relief, the existing shortage of data centres and their capacity in the EU from worsening and to avoid significant structural locational disadvantages for data centres operating within the EU that could deter potential investors across critical investment cycles, including renewal and modernisation phases, over the longer term. Given the time- and capital-intensive investment and modernisation cycles of data centres over the next 20 to 30 years and beyond, there would otherwise be an increasing risk of adhesion migration of industrial companies that are dependent on high server capacities and, above all, on exponentially growing computing demand over critical time horizons. A forward-looking assessment of these long-term investment and modernisation cycles further demonstrates the currently acute need for funding for data centres in the EU in order to avoid progressively undermining the Union's objectives as set out in the CEEAG and CISAF Communications.

X.

Explanatory note on sector eligibility

The key concepts of electricity and trade intensity for meeting the eligibility criteria are defined in the Explanatory Note on sector eligibility (hereinafter referred to as the "Explanatory Note"), which uses a transaction-based export-import approach to calculate trade intensity. Since a calculation based on this approach would generally result in insufficient trade intensity for data centres, the relevant discretionary framework may need to be supplemented with parameters that adequately take into account data traffic and data-processing-specific value added generated by data centres. From a strictly legal perspective, explanatory notes are non-binding statements of the Commission that acquire legal significance only insofar as the Commission relies on them to establish a self-imposed constraint in the exercise of its discretionary powers. In the case of the Explanatory Note relating to the CEEAG, it merely defines the terms "electricity intensity" and "trade intensity" used in the CISAF and CEEAG Communications and thus operates at the lowest level of this cascade of policy instruments. Its discretionary significance is therefore more limited than that of the Communications themselves. In principle, for reasons of equal treatment and the protection of legitimate expectations, the Explanatory Note is binding on the Commission under its self-imposed framework. If the Commission's policy statements are not designed to address the specific case at hand but instead to cover different factual constellations, the Commission may depart from its self-imposed framework where sufficiently weighty objective reasons justify such deviation and may base an approval decision directly on Article 107(3)(c) TFEU. In order to take proper account of the specific features of the case at issue, such a departure may even be required in light of the EU principle of proportionality.

XI.

Need to supplement data traffic-related eligibility criteria

A transaction-based calculation of trade intensity at Union level would generally result in trade intensity remaining below 5 % for the data centre industry, meaning that the eligibility criteria would not be met. The reason for this lies in the data-centric business model of data centres, which generate their direct value added not through the flow of goods but through the centralised processing of data. The calculation method set out in the Explanatory Note may therefore need to be supplemented with eligibility criteria based on data traffic and data-processing-specific parameters that adequately capture both the high value added generated by data centres and the specific risks of relocation outside Europe. For example, trade intensity could be assessed as a data-specific transaction intensity for data centres, measured on the basis of computing capacity and inbound and outbound data flows. Alternatively, a supplementary interpretation of the CISAF Communication incorporating such eligibility criteria reflecting the specific value added of data centres, or a direct assessment under Article 107(3)(c) TFEU, would be appropriate.

XII.

Possibility of direct application of Article 107(3)(c) TFEU as a legally sound funding alternative

Insofar as the method for determining electricity and trade intensity set out in the Explanatory Note — which is designed primarily for traditional industrial undertakings — is not adapted to the data-centric business models of data centres, a direct application of Article 107(3)(c) TFEU may constitute a legally sound alternative basis for support capable of effectively advancing the Union's objectives in practice.

Accordingly, the eligibility of data centres for aid would need to be assessed directly on the basis of the balancing test set out in paragraph 22 of the CEEAG Communication – which reflects the acquis of primary EU law relating to Article 107(3)(c) TFEU – and, as explained above, can in principle be satisfied.

B. Legal opinion

I. Initial situation and legal opinion questions

The coalition agreement between the governing parties for the 21st legislative period of the German Bundestag states (at lines 959 et seq.) that data centres should be included in the electricity price relief scheme. Against this background, the question arises whether electricity price relief for data centres would be compatible with EU State aid law and, moreover, whether such a measure would be appropriate.

This legal opinion is based on the definition of data centres set out in Annex A, point 2.6.3.1.16 of Regulation (EC) No 1099/2008, according to which *"a data centre is defined as a structure or a group of structures used to house, connect and operate computer systems/ servers and associated equipment for data storage, processing and/or distribution, as well as related activities."*

An electricity price relief for data centres constitutes State aid within the meaning of Article 107(1) TFEU, for which justification under Article 107(3)(c) TFEU may be considered. The discretion granted to the Commission under primary law is guided by the Commission Communication on the State Aid Framework for the Clean Industry Deal (hereinafter "CISAF Communication") to the effect that the Commission *„will consider compatible with the internal market on the basis of Article 107(3), point (c), of the Treaty, aid in the form of temporary electricity price relief for activities that operate in sectors for which these risks are particularly elevated."*[1]

The economic sectors eligible for temporary electricity price relief are determined at the Commission's discretion by reference to the list in Annex 1 to the European Union Guidelines on State Aid for Climate, Environmental Protection and Energy Aid (hereinafter referred to as the "CEEAG").[2] This list covers 91 sectors and sub-sectors, thus encompassing large parts of energy-intensive industries. However, only companies in the economic sectors listed there *"for which the multiplication of their trade intensity and electro-intensity at Union level reaches at least 2 % and whose trade intensity and electro-intensity at Union level is at least 5 % for each indicator"*qualify for aid in the form of temporary electricity price relief.[3] According to paragraph 405(a) of the Commission Communication on Guidelines on State Aid for Climate, Environmental and Energy Aid 2022 (hereinafter: "CEEAG Communication"), these are *"sectors at significant risk".* In order to be eligible for support in the form of temporary electricity price relief, the economic sector to be supported must therefore, in principle, be included in Section 1 of the CEEAG. Data centres are not expressly listed there. However, a functional interpretation of the list, informed by the principle of effectiveness, may support their inclusion.

[1] Communication from the Commission – Framework for State aid to support the Clean Industry Deal (Clean Industry Deal State Aid Framework), OJ 2025 C 3602, para. 114.
[2] See CISAF Communication, para. 116.
[3] Ibid.

Irrespective of this, a sector or subsector not listed *"will also be considered eligible provided that Member States demonstrate this with data that is representative of the sector or subsector at Union level, verified by an independent expert and based on a time period of at least the three most recent years for which data are available."*[4]

Eligibility for aid depends on the electricity and trade intensity of the economic sector concerned. These key terms are defined in the Explanatory Note on sector eligibility under section 4.11 of the draft CEEAG (hereinafter referred to as the "Explanatory Note"), which uses a transaction-based export-import approach to calculate trade intensity.[5] Since a calculation based on this would generally result in insufficient trade intensity for data centres, the question arises whether the relevant discretionary framework may need to be supplemented with parameters that adequately take into account data traffic and data-processing-specific value added generated by data centres.

This legal opinion therefore adresses the following questions arising from the initial situation:

1) Do the eligible economic sectors listed in Section 1 of the CEEAG also encompass data centres that are not only indispensable to the business activities of companies operating within those sectors, but are in fact functionally integrated into the eligible value creation process, in that they form an integral component of digital value creation management and, in line with the Industry 4.0 model, constitute the central infrastructure underpinning production processes controlled through them?

   a) Does this integrative approach to eligibility also support the objective of minimising latency risks associated with greater geographical distances between data centres and production facilities, as well as mitigating security and data loss risks arising at non-European locations due to the routing of data through network nodes that are neither controlled by companies nor subject to effective regulatory oversight?

   b) To what extent is support for data centres consistent with the regulatory principle that public intervention at an upstream level is generally more effective in fostering downstream industrial value creation than intervention at the downstream level?

   c) Is this integrative eligibility approach also necessary in light of the CEEAG objective of counteracting relocations to third countries, given that the eligible sectors listed exhibit a high structural propensity to relocate and that the investment costs associated with relocating data centres to third countries – compared with establishing them in the EU – are significantly lower, meaning that the barriers to relocation

[4] Ibid., para. 117.
[5] In the binding English version: *"Trade intensity of a NACE-4 sector is calculated as exports plus imports vis-à-vis countries located outside the EU, divided by turnover in the EU and imports from countries located outside the EU*." Explanatory note on sector eligibility under section 4.11 of the draft CEEAG, p. 1.

are lower for data centres than for traditional industrial investments in the listed sectors?

d) Does a counterfactual transaction cost analysis, viewed in the light of the "more economic approach" under State aid law, require this integrative eligibility approach, given that companies belonging to the eligible economic sectors listed in the CEEAG – with limited exceptions – are generally unable to operate fully fledged, high-performance data centres independently and are therefore, from a transaction cost perspective, compelled to procure such central digital infrastructure externally, potentially from third countries in the absence of eligibility, with resulting latency constraints and heightened security and data loss risks?

e) To what extent does this integrative eligibility approach take into account the high investment costs associated with establishing high-performance data centres, particularly in view of the substantial proportion of sunk costs involved? Conversely, in third countries, this negative investment incentive may be mitigated by lower energy costs and, in many cases, lower labour costs.

f) Given the currently insufficient data centre infrastructure in the EU, is it reasonable to assume that the absence of energy price relief for data centres will result in significant locational disadvantages for European industries within the next 20 to 30 years?

2) In cases where the integrative eligibility approach is not pursued, the question of inclusion upon application arises in accordance with paragraph 117 of the CISAF Communication: Do such data centres (not included in the CEEAG) meet the eligibility criteria set out in paragraph 116 of the CISAF Communication, so that, if sufficient evidence is provided, paragraph 117 requires that the discretion granted to the Commission under Article 107(3)(c) TFEU be exercised in such a way that temporary electricity price relief may be regarded as compatible with the internal market?

a) What is the significance of explanatory notes as interpretative aids to the CISAF Communication and for the Commission's exercise of its discretion under Article 107(3)(c) TFEU?

b) Can the Commission base an authorisation decision solely on the discretionary power conferred by primary law under Article 107(3)(c) TFEU, thereby departing from its own policy statements, including the CISAF Communication?

c) Must the eligibility criterion of trade intensity in paragraph 116 of the CISAF Communication be interpreted functionally for data centres in such a way that the

transaction-based export-import formula described in the Explanatory Note must be supplemented by a data-traffic- and data-value-creation-based assessment formula?

d) Should the eligibility criterion of trade intensity in paragraph 116 of the CISAF Communication be supplemented by an interpretative approach that is effective in practice for data centres, taking into account the intensity of data traffic and data value creation generated by the digital economy, or would such a new approach need to be based on the discretionary power conferred by primary law under Article 107(3)(c) TFEU, thereby departing from the CISAF Communication?

II. Detailed legal assessment

1st Inclusion of data centres in the CEEAG as a requirement of proportionality and consistency

The inclusion of data centres in the economic sectors listed in the CEEAG may be required in accordance with the principles of proportionality and consistency under EU law.

This proportionality and consistency assessment is set out in paragraph 22 of the CEEAG Communication (hereinafter: "assessment framework") and corresponds to the *acquis communautaire* of primary EU law:

"*When assessing whether environmental protection and energy aid can be considered compatible with the internal market under Article 107(3), point (c) of the Treaty, the Commission will analyse the following aspects:*

(a) as regards the first (positive) condition, that the aid facilitates the development of an economic activity: Identification of the economic sector promoted by the measure, the positive effects of the measure on society in general and, where applicable, its relevance to specific Union policies;

- *i) identification of the economic activity which is being facilitated by the measure, its positive effects for the society at large and, where applicable, its relevance for specific policies of the Union (see Section 3.1.1);*
- *ii) incentive effect of the aid (see Section 3.1.2);*

b) as regards the second (negative) condition that the aid does not unduly affect trading conditions to an extent contrary to the common interest:

- *i) the need for State intervention (see Section 3.2.1.1);*
- *ii) the appropriateness of the aid (see Section 3.2.1.2);*
- *iii) the proportionality of the aid (aid limited to the minimum necessary to attain its objective) including cumulation (see Section 3.2.1.3);*
- *iv) the transparency of the aid (see Section 3.2.1.4);*
- *v) avoidance of undue negative effects of the aid on competition and trade (see Section 3.2.2);*

vi) weighing up the positive and negative effects of the aid (see Section 3.3).

a) Identification of the economic sector supported by the measure and the positive effects of the measure on society in general

According to paragraph 17 of the CISAF Communication, the Commission considers that aid granted under this Communication *"aims at incentivising investments and activities in certain sectors that contribute to the objectives defined in the Clean Industrial Deal Communication, thereby facilitating the development of specific economic activities, namely those falling within the scope of the relevant sections of this Communication".*

With regard to the aid in question here in the form of temporary electricity price relief, the CISAF Communication stipulates in paragraph 116 that *"The risk at sectoral level of activities moving outside the Union to locations where environmental disciplines are absent or less ambitious largely depends on the electro-intensity of the sector in question and its openness to international trade. Accordingly, aid can only be granted to undertakings from sectors where such risks are significant."* This applies to the economic sectors listed in Section 1 of the CEEAG, which are characterised by high electricity and trade intensity and to which paragraph 116 expressly refers.[6]

These sectors belong to traditional energy-intensive industries and rely on data centres to control, optimise and monitor their production processes, which raises the question whether it is necessary to include data centres in the listed sectors in order to maintain the regulatory proportionality and consistency of the support scheme.

By strengthening the European economy and improving living conditions in the EU, the funding measure is intended to have a positive impact on social welfare.

b) Incentive effect of the aid

According to paragraph 18 of the CISAF Communication, State aid must have an incentive effect, *"meaning that it induces the beneficiary to undertake an investment or activity that it would not undertake, or would carry out in a restricted or different manner, absent the aid".*

In this Communication, the Commission explicitly stated that *"an incentive effect is presumed where the start of works on the project or activity only takes place after a written aid application by the beneficiary to the competent authorities."*[7] Such a derogation is found in paragraph 119, which states that *"aid is compatible with the internal market only if it has an incentive effect. For the aid to have an incentive effect and actually prevent the risks described in section 4.5.1, it must be applied for and paid to the beneficiary in the year in which the costs are incurred or*

[6] See para. 116 of the CISAF Communication in conjunction with para. 405 of the CEEAG Communication.
[7] CISAF Communication, para. 18.

in the following year." If these conditions are met, the incentive effect of a temporary electricity price relief is deemed to be established.

On the other hand, based on the logic of the incentive effect described above, it may be appropriate to include data centres in the list so that this presumed incentive effect also applies to data centres. A counterfactual analysis, i.e. a comparison of the effects of the decision with those of the hypothetical opposite scenario, in light of the "more economic approach" under State aid law, is a suitable method for examining the incentive effects of including data centres. Whether there has been a violation of competition rules must therefore be assessed **by reference to** the economic effects of the measure under examination.[8]

For companies in the listed sectors, the question is not **whether** data centres are necessary for their competitive business activities — they are an indispensable part of value chain management — but rather **how** the continuous procurement of server capacity can be organised most efficiently while complying with EU law. There are two options to consider: either operating a data centre in-house or using externally operated data centres. A company's decision between these two alternatives depends in particular on opportunity and transaction costs, and company management will opt for the option that results in the lowest overall cost.[9]

Operating a data centre requires high initial investments, ties up capital in the long term – which cannot then be invested elsewhere in production – and must be designed in such a way that excess capacity is maintained for periods of higher computing demand.[10] If a company decides to operate its own data centre, this entails additional operating costs associated with coordinating operations and employing and training specialised data centre staff.[11] Using an external data centre avoids these costs and replaces them with agreed recurring payments for the required server capacity.[12] In a company survey*, "59.5 % of companies stated that they save costs by transforming high fixed costs incurred by their own IT departments into variable costs through cloud services."*[13] This results in a particular advantage in terms of flexibility, as – provided this is contractually agreed – capacities can be adjusted quickly and there is no need to maintain excess computing power. In addition, no high capital-intensive upfront investments are required.[14]

As a result, companies in the industries listed will generally not operate fully fledged, high-performance data centres of their own integrated into production operations, but will instead – at least to a significant extent – opt to use external data centres as the more opportunity- and transaction-cost-efficient alternative.

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[8] See Haratsch/Koenig/Pechstein, Europarecht, 13th edition, 2023, para. 1070.
[9] Transaction cost analysis can be traced back to Ronald Coase's 1937 essay *"The Nature of the Firm"*.
[10] See Barroso, L. A., Hölzle, U., Ranganathan, P., The Data Centre as a Computer. Designing Warehouse-Scale Machines, 4th edition, 2026, p. 201, available at https://doi.org/10.1007/978-3-031-99489-0, last accessed on 19 January 2026.
[11] See ibid., p. 204.
[12] See KPMG, Equinix's Contribution to the German Economy, 2024, p. 3.
[13] IW Consult, AWS Impact Study Germany. The importance of AWS for the German economy, 7 July 2022, p. 6.
[14] See Colocation Data Centre, 20 August 2025, https://www.rechenzentren.org/allgemein/colocation-rechenzentrum/, last accessed on 18 January 2026.

If external data centres, unlike internal, self-operated data centres[15] , were not included in the list, the Commission would be promoting an outcome that is inefficient in terms of opportunity and transaction costs and, above all, in relation to the Union's objectives. This would contradict the "more economic approach" that the Commission itself applies to its decisions in competition law and would therefore be inconsistent. The Commission would create a misguided incentive for companies to either opt for the inefficient operation of their own fully-fledged high-performance data centre or to resort to external data centres located outside Europe, which would, however, result in serious latency problems, security and data loss risks, geopolitical dependencies and the loss of jurisdictional oversight.

Based on the logic of the incentive effect described above, it is therefore appropriate to include data centres in the CEEAG so that the presumed incentive effect also applies to data centres. Only by including data centres in the funding scheme can an economically efficient outcome, in terms of opportunity and transaction costs, be achieved that is consistent with the EU's objective of preventing industrial companies from relocating to third countries with lower environmental standards.

c) No violation or circumvention of relevant provisions of EU law

According to paragraph 20 of the CISAF Communication: *"If the supported project or activity, or the aid measure or the conditions attached to it, including its financing method when it forms an integral part of the measure, entail a violation of relevant Union law, the aid cannot be declared compatible with the internal market."* In the event of data centres relocating to third countries as a result of being excluded from funding, their use by companies producing in the EU give rise to a risk of non-compliance with, or circumvention of, EU law.

Data protection requirements under the GDPR apply to data centres operated in the EU, as data centre operators process personal data on behalf of third parties and are therefore regularly considered processors within the meaning of Article 4(8) GDPR. As such, they must take appropriate technical and organisational measures in accordance with Article 32 GDPR to ensure a level of protection appropriate to the risks involved in data processing (including destruction, loss, alteration or unauthorised disclosure of personal data). If the data centres are located outside the EU, the provisions of Article 44 et seq. GDPR also apply. Data processing in third countries is therefore only permitted if the controller and the processor comply with the conditions set out in this chapter and also with the other provisions of the GDPR. In order to generally permit data processing in a third country, the Commission must adopt an adequacy decision in accordance with Art. 45(1) GDPR, declaring that the third country concerned ensures an adequate level of protection. In the absence of such a decision, the controller or processor must, in principle, provide appropriate safeguards in accordance with Article 46(1) GDPR, and

[15] Activities in which data processing equipment is used merely as an aid are classified according to the service offered, cf. Federal Statistical Office, Classification of Economic Activities, 2008, subclass 63.11.0, p. 443, which corresponds to the NACE classification (Rev. 2) under EU law.

enforceable rights and effective legal remedies must be available to the data subjects. If neither an adequacy decision nor suitable safeguards are in place, a breach of the GDPR can only be avoided by invoking an derogation under Article 49 GDPR.

Furthermore, data centres are regulated as "highly critical sectors" by the NIS 2 Directive for the purposes of cybersecurity regulation.[16] The Directive also applies to data centres operated in third countries, as these must appoint a representative in the Union in accordance with Article 26(3) of the NIS 2 Directive, who must be established in one of the Member States where the services are offered. The NIS 2 Directive aims to increase cybersecurity in the EU for so-called "essential entities", which also include data centres. To this end, it standardises company-related risk management measures (Article 21) and reporting obligations for security incidents (Article 23) as minimum harmonisation requirements.

Both the GDPR and the NIS 2 Directive therefore contain security requirements for data centres operated in third countries. This provides a legal countermeasure to any undermining of EU security requirements; under the GDPR, additional requirements even apply compared to data centres operated in the EU. However, the practical enforcement of the requirements of the GDPR and the NIS 2 Directive in third countries is much more difficult than in the EU. The European Parliament's Research Service summarises that *"recent assessments have highlighted shortcomings in the enforcement of the European Union's General Data Protection Regulation (GDPR). These include **lengthy procedures**, **divergent practices**, and **functional flaws**."*[17] (emphasis added) In response to this, additional procedural rules are to be implemented to *"ensure the swift and consistent resolution of cross-border cases and to harmonise parties' rights during the procedure"*[18] These shortcomings are even evident in cross-border cases within the EU,[19] so that the European Data Protection Board states with regard to the extraterritorial scope of the GDPR that *"practical enforcement of these provisions by the DPAs or courts against entities without any property within the EU's territory seems very difficult, if not impossible."*[20]

Despite the provisions of the GDPR and the NIS 2 Directive extending to third countries, serious enforcement problems arise in practice. As a result, there is a high risk that security breaches committed by data centre operators located in third countries cannot be adequately monitored and sanctioned, thereby effectively undermining the GDPR and the NIS 2 Directive. In order to ensure the practical effectiveness of European data protection and security law and to prevent enforcement gaps, it is therefore appropriate to extend the possibility of support through temporary electricity price relief to data centres in order to effectively and coherently prevent the migration of data centres to third countries, including from a data protection perspective.

[16] Cf. Directive (EU) 2022/2555, OJ L 333, 14 December 2022, p. 143, Annex I.
[17] European Parliament Research Service, New procedural rules under the GDPR for cross-border cases, PE 777.953, October 2025, p. 1.
[18] Ibid.
[19] See Gentile G., Lynskey O., Deficient by design? The transnational enforcement of the GDPRS, 2022, p. 806 ff.
[20] Kastlová, Helena, Report on the extraterritorial enforcement of the GDPR, 17 April 2024, p. 5.

d) Necessity of State intervention

According to paragraph 26 of the CISAF Communication*, "in view of the need to accelerate the eligible investments and activities under this Communication, the Commission considers that the market alone would not be able to sufficiently deliver the necessary level of investments or activities within the timeline necessary to achieve a clean, just and competitive transition."* The necessity of promoting the listed economic sectors is thus implied by the reference in paragraph 116 of the CISAF Communication. The inclusion of data centres in the list, which would result in the extension of the fictitious effect to data centres, could be justified in view of the Union's funding objectives.

Most energy-intensive industries in the listed economic sectors require large production facilities. If traditional industrial companies decide to relocate, this will require considerable investment in new production facilities located outside the EU. From an economic perspective, investing in a plant entails high sunk costs, which render relocation very costly and considerably more difficult. In addition, the economic sectors listed often depend on the availability of certain raw materials and established industrial clusters, which makes opening a new location in third countries even more challenging. Even in the presence of high energy demand and favourable conditions at the foreign location, the crucial question therefore arises as to the profitability and feasibility of such a capital-intensive investment in a non-EU production location.

This question also arises in the case of data centres, but in many cases they are more flexible in terms of location, provided that an economical supply of electricity, a high-performance broadband connection, personnel, production space and an operating licence are guaranteed.[21] They can be operated in isolation without relying on business clusters or the availability of raw materials, although proximity to customers may be important depending on the application. In addition, modular data centres allow for rapid and flexible expansion of capacity, which is often not possible with complex industrial production facilities.[22]

Another characteristic that has a significant impact on the location of data centres is the very high power consumption required for their operation.[23] According to the Commission, *"the energy consumption of data centres in the Union was **76,8 TWh**. This is expected to rise **to 98,5 TWh by 2030**, a **28 % increase**. This increase in absolute terms can also be seen in relative terms: within the Union, data centres accounted for **2,7 %** of electricity demand in **2018** and will reach **3,21 %** by **2030** if development continues on the current trajectory"*[24] (emphasis added) A report by IDC shows that *"power consumption has become **the largest cost factor** for*

[21] See Turek, Dirk, The location of data centres taking into account the total cost of ownership – A framework for multi-criteria decision analysis, 2022, p. 19.
[22] See Modular Data Centres – Container Data Centre in Modular Design, 23 November 2024, https://www.rechenzentren.org/allgemein/modulare-rechenzentren-data-center-container-module/, last accessed on 17 January 2026.
[23] See German Bundestag, Response of the Federal Government to the minor interpellation of the CDU/CSU parliamentary group "Digital technologies – new opportunities for reconnaissance and action", printed paper 20/13937, 21 November 2024, p. 1 f.
[24] Directive (EU) 2023/1791, OJ L 231, 13 September 2023, para. 85.

enterprise data centres, ***accounting for 46% of total operating costs****."*[25] (emphasis added) The expected electricity price is therefore a key decision-making criterion for data centre operators when choosing a location, meaning that data centres are likely to react even more strongly to high electricity prices than traditional energy-intensive industrial companies.

Compared to companies in the listed energy-intensive sectors, the investment costs of relocating data centres to third countries are relatively lower, so that a comparatively higher sensitivity to electricity prices can be assumed. Relocation of data centres is therefore easier and more likely.

Unlike the traditional industrial companies listed, data centres are not dependent on the availability of raw materials or location in a business cluster, so data centre operators base their choice of location largely on the price of electricity as the biggest cost factor. Compared to the companies listed in the CEEAG, data centres are therefore at least equally, if not **more**, at **risk of relocation** if they are not included in the list of eligible companies for funding. In the interests of a practical and coherent funding policy, it is therefore appropriate to extend funding to data centres.

e) Suitability of the aid

Support for the economic sectors listed in the CEEAG through temporary electricity price relief should be effective in promoting the objective pursued in paragraph 113 of the CISAF Communication of preventing these industries from relocating to locations outside the Union where environmental regulations are less stringent. The Commission assumes *"that State aid within the scope of this Communication is, in principle, an appropriate measure to incentivise the investments and activities eligible for aid provided all applicable conditions in the relevant sections are complied with."*[26] It is therefore assumed that the promotion of the economic sectors listed is suitable for achieving that objective.

The listed energy-intensive industries, which may also sell their products abroad due to their high export-import trade intensity, are to be prevented from relocating their operations outside the EU or investing abroad by means of the temporary electricity price relief aid instrument. [27] The temporary electricity price relief reduces electricity costs, which constitute a significant cost factor for companies in the listed energy-intensive sectors, and is therefore, in principle, suitable for preventing relocation abroad.

However, on closer examination, it may be appropriate to include data centres in the listed economic sectors.

[25] International Data Corporation, IDC Report Reveals AI-Driven Growth in Datacenter Energy Consumption, Predicts Surge in Datacenter Facility Spending Amid Rising Electricity Costs, 24 September 2024, available at https://my.idc.com/getdoc.jsp?containerId=prUS52611224, last accessed on 15 February 2026.
[26] CISAF Communication, para. 27.
[27] See ibid., para. 113.

aa) Data centres as an integral part of digital value chain management

Data centres are an integral component of modern industrial companies, without which competitive business models in modern industries ("Industry 4.0") would no longer be conceivable. As control units for modern production processes, data centres are not only an indispensable functional prerequisite for companies in the listed economic sectors in the sense of a conditio sine qua non causality, as the Commission makes clear when it states that ***"data is becoming a strategic asset for any organisation."***[28]

Data centres are so closely networked with the control, production and monitoring programmes of modern Industry 4.0 manufacturing facilities that, even if their services are sourced externally, they are fully **integrated** into modern industrial companies, **both virtually and in terms of value creation.** By enabling the automation of production processes and thereby avoiding the error-prone nature of human involvement in highly complex processes, data centres generate independent internal value creation that is so intertwined with corporate processes that the separation of data centres and industrial plants is unthinkable. Due to the profound integration of data centres into the production value chains of modern industrial companies, it has become impossible for the economic sectors listed, such as the manufacture of chemical fibres, the processing of nuclear fuels or the manufacture of motorcycles, to maintain competitive business operations without the data centres that are permanently operated for the respective companies in the listed economic sectors. This is illustrated by a briefing from the European Parliament's Research Service in December 2025 on the Commission's planned legislative initiative on the Cloud and AI Development Act, which emphasises that *"Data centre capacity in the European Union is insufficient. The lack of capacity negatively impacts EU innovation, hindering economic growth."*[29]

In 2025, the Commission will propose the *"**Cloud and AI Development Act**, with the aim to at least **triple the EU'a data centre capacity within the next 5 to 7 years** and fully meet the needs of EU businesses and public administrations by 2035. The Act will streamline the deployment of data centres by identifying suitable sites and simplifying permitting processes for projects meeting sustainability and innovation criteria."*[30]

Modern industry is characterised by the ongoing digitalisation of its production chains, which would be impossible without data centres as the "technological backbone" of control and platform applications. In particular, the increasing use of artificial intelligence in the listed economic sectors also requires corresponding server capacity in data centres.
In its communication on "Digital Compass 2030: Europe's Path to the Digital Decade", the Commission states that *"by 2030, more than just enablers, **digital technologies** including 5G,*

[28] Commission, In-depth reviews of areas of strategic importance to Europe's interests, https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/depth-reviews-strategic-areas-europes-interests_de, last accessed on 11 January 2026.
[29] European Parliamentary Research Service, Cloud and AI Development Act – Commission initiative in preparation, Briefing PE 779.251, December 2025, p. 1.
[30] Cloud computing, https://digital-strategy.ec.europa.eu/en/policies/cloud-computing, last accessed on 14 January 2026.

the Internet of Things, edge computing, Artificial Intelligence, robotics and augmented reality ***will be at the core of new products, new manufacturing processes and new business models*** *based on fair sharing of data in the data economy."*[31]

The European Parliament's Research Service also concludes that *"increased EU data centre capacity would benefit AI innovation, as would research and innovation to achieve resource optimisation and the decentralisation of computational tasks. Weak EU AI development could further hurt EU competitiveness across industries by slowing digitalisation."*[32]

It should therefore be noted that the industrial companies listed in the CEEAG can only operate competitively in the EU if they have access to data centres.

There is much to suggest that the Commission, when compiling the list, could reasonably have assumed that data centres are included as an integral part of the value chain of the companies in the sectors listed, especially since the Commission, despite their very high electricity consumption, clearly did not consider data centres to constitute a separate sector when compiling the list.

In the Commission's Explanatory Note, which was used to define the two criteria for inclusion in the list (electricity and trade intensity) and which lists all economic sectors examined on the basis of these criteria with the corresponding assessment results (level of electricity intensity and level of trade intensity), data centres are not mentioned.[33]

Even if their services are sourced externally, data centres are fully integrated into modern industrial companies, both virtually and in terms of value creation, and are therefore **indispensable** to the competitive business activities of companies in the sectors listed in the CEEAG. They control highly complex manufacturing processes and, through automation, enable gains in efficiency and accuracy that would not be possible without them, meaning that data centres **contribute significantly to the value creation of the industries that depend on them**. Accordingly, coherent support for the listed economic sectors should also extend to data centres.

bb) Latency issues, security and data loss risks, geopolitical dependencies on third countries and loss of jurisdictional oversight for data centres located outside the EU

Greater geographical distances between data centres located outside the EU and the European companies they serve lead to higher latency, i.e. a longer delay between an action taken by the company and a response from the server located in the data centre. This higher latency poses a significant threat to the stability of production processes and can noticeably impair the quality of products. In its briefing, the European Parliament's Research Service writes that *"in addition to optimising resources for infrastructure, the Commission proposes a computation continuum*

[31] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – Digital Compass 2030: Europe's path to the digital decade, COM(2021) 118 final, 9 March 2021, p. 10.
[32]European Parliamentary Research Service, Cloud and AI Development Act – Commission initiative in preparation, Briefing PE 779.251, December 2025, p. 1.
[33] See explanatory note p. 2 ff.

as another means to securing AI leadership. A computation continuum is the integration of intermediate layers to address cloud limitations, ***including latency and cost****."*[34]

The Commission is therefore aware of the problem of high latency and intends to address it specifically through the proposed legislation on the development of cloud services and artificial intelligence.

In addition, the use of a data centre located outside the EU increases the risk of security breaches and data loss significantly, as a greater number of network nodes must be passed through on the way to and from the data centre. Each network node that the data must pass through on its way to and from the data centre increases the risk of data being deliberately intercepted or lost. This is exacerbated by the fact that network nodes located outside the EU are not subject to the regulation and monitoring of European data protection standards, which increases the risk of successful unauthorised access to sensitive company data. This is in line with the Commission's approach in the Cloud Sovereignty Framework, which was adopted in October 2025 to assess the sovereignty of cloud services and take this into account in EU procurement procedures. Among other things, the Commission attaches importance to the protection and control of data and to a high level of data autonomy within the EU in order to reduce dependencies on non-European cloud infrastructure and thereby mitigate security risks.[35]

These autonomy efforts by the EU in the area of data centres, which are also relevant for so-called "critical infrastructure", are taking place against a backdrop of increasing geopolitical tensions and are therefore becoming increasingly important for European companies. Not only would data be stored and processed externally, which in itself poses a serious security risk, but companies would also have to reckon with the possibility of deliberate, short-term restrictions on the operation of data centres affecting European companies. This could result in massive production losses that could not be replaced in a timely manner without sufficient computing capacity in the EU. The Commission therefore also intends to triple computing capacity over the next five to seven years in the Cloud and AI Development Act *in* order to *"*strengthen *Europe's* ***digital sovereignty in the cloud sector"***.[36] The strategic importance of data centres is particularly evident in the European Parliament's report on technological sovereignty and Europe's digital infrastructure, which devotes a separate section to them (para. 78 ff.) and emphasises, among other things, that *"to prevent vendor lock-in and ensure that European industrial ecosystems can leverage data-driven innovation without technical or contractual barriers."*[37]

The more the digitalisation of the economic sectors listed in the CEEAG progresses, the less geographically distant data centres represent a reasonable option for companies in the economic

[34] European Parliamentary Research Service, Cloud and AI Development Act – Commission initiative in preparation, Briefing PE 779.251, December 2025, p. 4.

[35]European Commission, Directorate-General for Digital Services, Cloud Sovereignty Framework, Version 1.2.1, October 2025, p. 2 ff.

[36] Cloud computing, https://digital-strategy.ec.europa.eu/en/policies/cloud-computing, last accessed on 17 January 2026.

[37] European Parliament, Report on European technological sovereignty and digital infrastructure, A10-0107/2025, 11 June 2025, para. 80, available at https://www.europarl.europa.eu/doceo/document/A-10-2025-0107_EN.pdf, last accessed on 17 January 2026.

sectors listed and for the EU's objectives. This conclusion is supported by a survey of data centre users in Germany regarding their location preferences for the nearest data centre they use. *"45 % of companies want a location in Germany, a small proportion of them even in the immediate vicinity.* [...] *Of the large companies with 250 or more employees, 54 % would like a location in Germany."*[38] The companies whose relocation to countries outside the EU the Commission wishes to prevent by including them in the list could therefore be forced to relocate to countries outside the EU in order to follow the relocation of the data centres that are indispensable to them if there were no funding opportunities for data centres.
Rejecting the funding opportunity for data centres could therefore have the opposite effect to the Commission's intention, contrary to the requirement for regulatory consistency, namely an exodus of the energy-intensive companies listed in the CEEAG.

The use of data centres operated in third countries poses considerable problems for European industrial companies and exposes them to serious risks. Higher latencies due to distance can significantly jeopardise the stability and quality of production processes, passing through non-European network nodes exposes companies to high cyber security and data loss risks, and geopolitical dependence on other countries not only makes the availability of data centres uncertain, but also results in the loss of jurisdictional monitoring access. In addition to preventing the relocation of listed industrial companies, other EU objectives would therefore be jeopardised if data centres were not supported.

f) Proportionality of the aid (limited to the minimum necessary to achieve the objective)

According to paragraph 29 of the CISAF Communication*, "aid is considered proportionate if the aid amount per beneficiary is limited to the minimum needed for carrying out the aided project or activity."* In the Commission's view, proportionality is generally ensured *"if the aid amounts are determined through a competitive bidding process, because it provides a reliable estimate of the minimum aid required by potential beneficiaries."* For electricity price relief, the Commission has formulated the additional condition that it *"will consider the aid to be proportionate for beneficiaries from the sectors in points (116) and (117) if it covers at most a reduction by 50 % of the yearly average wholesale market price in the bidding zone in which the beneficiary is connected, for not more than 50 % of their annual electricity consumption. The total annual electricity consumption can be measured either in the year in which the eligible cost arises or in the previous year. The Commission also considers that, in order for the aid to be proportionate, such reductions must not result in a reduced price below 50 EUR/MWh for the eligible consumption."*[39] Even if support for the listed economic sectors, excluding data centres, would meet these specific conditions, the question arises as to the overall proportionality of such limited support. In terms of the effectiveness of achieving the objective, the

[38] IW Consult, Spillover effects of data centres: Backbone of the AI revolution in Germany, 2024, p. 30.
[39] CISAF Communication, para. 120.

inclusion of data centres could be a more effective support practice in order to coherently achieve the set objective of preventing industrial relocation.

aa) Positive spillover effects in line with the regulatory economic principle of applying state intervention at the upstream market level wherever possible in order to maximise its value creation efficiency in downstream markets and minimise distortions of competition in these markets

The promotion of data centres could, through so-called spillover effects, provide even more efficient support for the economic sectors listed in the CEEAG than direct promotion, both in economic and business terms.

According to a recent study*, "almost 5.9 million people* are employed *in companies with purely cloud-based business models in Germany*," meaning that cloud and colocation services, and thus data centres*, "already support around 12.8 % of German employment."*[40] A comparison of these figures with those from two years ago shows an average monthly increase of 126,000 employees in companies whose business model would not be feasible without cloud services. Data centres are thus making a significant contribution to employment growth in Germany.[41] The importance of data centres for the German economy becomes even clearer when looking at the gross value added generated: If the direct and indirect value-added effects generated by data centres are aggregated, *"the use of data centres will result in additional gross value added of around* ***€250 billion*** *for the German economy in 2023."*[42]

These substantial value-added effects correlate with the increase in companies that are dependent on data centres. From 2022 to 2024, the proportion of data centre users whose business model would not function without cloud or colocation services increased significantly from 16.8 % to 26.7 %.[43] Of the companies with at least 250 employees, 69 % were already using cloud services in 2023,[44] which illustrates the considerable importance of data centres for modern industrial companies. Large companies in particular are structurally dependent on data centres and closely integrated with them.

Due to a temporary electricity price relief for data centres, the value-added effect of their upstream promotion would be leveraged more evenly and with less distortion of competition on the downstream markets of the economic sectors listed in the CEEAG. In addition, this positive spillover effect would be amplified over time in view of the statistical growth figures collected across a wide range of industrial sectors and their value chains, which are induced by data centres. This is in line with the guiding principle of regulatory economics (especially in network industries), according to which public interventions should be applied at the upstream market

[40] See IW Consult, Spillover Effects of Data Centres: Backbone of the AI Revolution in Germany, 2024, p. 27.
[41] See ibid., p. 28.
[42] See ibid., p. 29.
[43] Results of a company survey conducted from April to June 2022 compared to August 2024, cf. IW Consult, Spillover Effects of Data Centres: Backbone of the AI Revolution in Germany, 2024, p. 27.
[44] See ibid., p. 23.

level as far as possible in order to maximise their value-added efficiency in downstream markets while minimising distortions of competition in those markets. In terms of regulatory economics, it is therefore even a priority to include data centres in the temporary electricity price relief.

bb) Lower investment barriers in third countries

Including data centres in the economic sectors listed in the CEEAG could be appropriate in view of the relatively lower (initial) investment barriers in third countries in order to achieve the Union's objectives.

Nevertheless, investments in data centres are highly capital-intensive due to the high costs of the server technology used[45] and, because they are generally location-bound, are associated with high sunk costs once an investment decision has been made. Large, high-performance data centres used by industrial companies in particular thus exhibit market entry barriers that are comparable to the characteristics of a natural monopoly, even if they do not fully reach that level. In addition to the high irreversible investment costs, data centres are relatively easy to scale up, provided they have been built using a modular design. Data centre operators who have already invested benefit from their high initial investments due to the relatively low marginal costs. This favours investors who have overcome the high capital threshold of the initial investment, meaning that investments in data centre locations are primarily suitable for large-scale investors.

However, large investors operating globally compare location conditions worldwide before deciding on a capital-intensive investment project with a long payback period. Due to the high power consumption, the expected electricity prices at the investment location are a key factor in the choice of a data centre location, as they play a decisive role in ensuring the fastest possible return on investment.

Furthermore, data centre operators are dependent on highly qualified personnel, so that personnel costs will also be a key deciding factor between several generally suitable locations. Against this backdrop, so-called emerging markets, which have highly qualified personnel but lower wage levels due to demographic factors and lower average electricity costs, have a structural advantage over European countries when it comes to investment decisions by large investors.

In order to compensate for structural barriers to investment in the EU due to prohibitive electricity and personnel costs, which are relatively high compared to third countries, in the case of already very capital-intensive investments in data centres, which, however, operate at lower marginal costs compared to other industries once the initial investments have been made, it is necessary to include them in the listed economic sectors. inclusion in the listed economic sectors is necessary. Otherwise, there is a risk of adhesion migration beyond the investment migration of data centres, i.e. a migration of the listed eligible industries following the data centres

[45] See McKinsey Quarterly, The cost of compute: A $7 trillion race to scale data centres, 28 April 2025, https://www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/the-cost-of-compute-a-7-trillion-dollar-race-to-scale-data-centers, last accessed on 18 January 2026.

as a result of a lack of server capacity in the EU and the demanding latency minimisation requirements of modern production facilities, which can then only be met in third countries with locational advantages for data centres.

cc) Currently acute need for funding with a forward-looking view to future time- and capital-critical investment and modernisation cycles for data centres

Against the backdrop of the already insufficient server capacity in the EU, the exclusion of data centres from the CEEAG of eligible sectors for funding could result in medium- and long-term structural locational disadvantages for European industries. According to the General Secretariat of the Council of the EU*, "the EU does not have the cloud and edge infrastructure it needs to become the AI continent.* [...] *The capacity of data centres in Europe is expected to increase to 13 GW by 2027, but* ***future demand is likely to be 10 GW higher."***[46] The General Secretariat draws a concrete comparison with the US, where *"installed capacity in the US* ***is already three times higher than in the EU*** *(25 GW) and* ***is expected to rise to 65-80 GW*** *by 2030, depending on the US's ability to access the necessary energy."* According to current forecasts, the EU will therefore not be able to meet the expected demand for server capacity in data centres in the EU by 2027. In addition, existing data centres will need to undergo a technological overhaul in 15 to 25 years, requiring a capital-intensive replacement of server technology, whereas the building shells can be used for over 40 years.[47] With regard to existing data centres, the question of the profitability of further capital-intensive investment in the renewal and modernisation of technology will therefore arise in the foreseeable future. The EU therefore already faces insufficient private investment in European data centres to meet the projected demand.

Furthermore, important decisions will have to be made in the medium term regarding the renewal of server technology in existing European data centres. If, against this backdrop, the Commission rejects the inclusion of data centres in the listed economic sectors and thus the possibility of temporary electricity price relief, this could, given the high electricity costs in the EU, result in significant structural locational disadvantages for data centres operating in the EU and have a serious deterrent effect on potential investors across critical investment cycles, including renewal and modernisation, over a long time horizon. The problems of meeting demand for European server capacity would be significantly exacerbated – also against the backdrop of the signal effect of such a rejection of subsidies – and would noticeably hamper the development and use of AI in Europe, which is very data-intensive, for decades to come.

The Commission should therefore swiftly include data centres in the CEEAG in order to prevent, by means of temporary electricity price relief, the existing shortage of data centres and their capacity in the EU from worsening in the future and to prevent significant structural

[46] General Secretariat of the Council of the European Union, Boosting Cloud and AI Development in the EU – Presidency discussion paper, WK 2581/2025 INIT, 25 February 2025, p. 1.
[47] Translated from English: Barroso, L. A., Hölzle, U., Ranganathan, P., The Data Centre as a Computer. Designing Warehouse-Scale Machines, 4th edition, 2026, available at https://doi.org/10.1007/978-3-031-99489-0, last accessed on 19 January 2026, p. 203.

location disadvantages for data centres operating in the EU from having a serious deterrent effect on potential investors across critical investment cycles, including renewal and modernisation cycles, over a longer time frame. Given the time- and capital-critical investment and modernisation cycles of data centres over the next 20 to 30 years and beyond, there would otherwise also be an increasing risk of adhesion migration of industrial companies that are dependent on high server capacities and, above all, on their exponentially growing demand. A forward-looking view of future time- and capital-critical investment and modernisation cycles reveals the currently acute need for support for data centres in the EU in order not to progressively undermine the Union's objectives pursued in the CEEAG and CISAF communications over time.

g) Transparency of the aid; avoidance of excessive negative effects of the aid on competition and trade; weighing up the positive and negative effects of the aid

The granting of temporary electricity price relief must be transparent, i.e. subject to objectively verifiable conditions. The CISAF Communication contains transparent eligibility criteria, so that transparency is ensured provided that Member States publish their specific support modalities when granting aid. The clear sectoral restriction of the aid and the time limit on electricity price reliefs laid down in point 126 of the CISAF Communication (maximum aid duration of three years; maximum aid duration until 31 December 2030) mean that the aid for data centres is not expected to have any excessive negative effects.

2nd Need to supplement the eligibility criteria in the Explanatory Note and the CISAF Communication with parameters specific to data traffic and data processing or alternatively: direct application of Article 107(3)(c) TFEU

a) Discretionary significance of the Explanatory Note

The key concepts of electricity and trade intensity for fulfilling the eligibility criteria are defined in the Explanatory Note, which uses a transaction-based export-import approach to calculate trade intensity. Since a calculation based on this approach would generally result in insufficient trade intensity for data centres, consideration should be given to supplementing the Explanatory Note with parameters that adequately take into account the data traffic and data processing-specific value added by data centres.

From a strictly legal point of view, explanatory notes are non-binding statements by the Commission which only acquire indirect legal significance insofar as the Commission uses them to create a self-imposed obligation in the exercise of its normative discretion. The ECJ has not objected to the adoption of so-called "*indicative rules of conduct*" in which the Commission sets out its intended decision-making practice, in the absence of a conflicting prohibition in the

Treaties, and has thus recognised them as permissible.[48] However, these are not legal norms consisting of facts and legal consequences, but rather "soft law instruments". This also includes explanatory notes, which, as their name suggests, serve to provide explanations and do not establish any legal consequences of their own. They do not create any legal obligations for Member States or private individuals.[49] However, by issuing them and implicitly announcing their future application, the Commission is binding itself, insofar as the applicable law grants it discretionary powers. The Court states that *"In adopting rules of conduct and announcing by publishing them that they will henceforth apply to the cases to which they relate, the Commission imposes a limit on the exercise of its aforementioned discretion and cannot depart from those rules under pain of being found, where appropriate, to be in breach of general principles of law, such as equal treatment or the protection of legitimate expectations, unless it gives reasons justifying, in the light of those principles, its departure from its own rules."*[50]

The explanatory note to the CEEAG explains the methodology and data used to determine the economic sectors listed as being at risk of relocation.[51] According to paragraph 405 of the CEEAG Communication, the risk of relocation under the s only *"largely"* dependent on electricity and trade intensity. However, the Commission has decided to use only these two criteria to assess the risk.[52] The explanatory note defines the eligibility criteria of trade and electricity intensity, thereby clarifying the content of the CEEAG Communication.

The CISAF Communication adopts these eligibility criteria as *"eligibility criteria"*[53] and refers to Section 1 of the CEEAG for the determination of eligible economic sectors.[54] Through this reference, the Commission draws on the definitions of electricity and trade intensity in the Explanatory Note. In doing so, it pursues the same objective as the CEEAG Communication, namely, to reduce the risk of non-European relocation of companies in energy-intensive industries associated with negative environmental externalities by offering a funding opportunity.

Both Commission communications are themselves only discretionary "soft law" and have no legal consequences. They are also legally non-binding statements that only gain legal significance through the Commission's self-commitment. This creates a cascade-like structure: Article 107(3)(c) TFEU primarily regulates the Commission's discretion to consider aid compatible with the internal market. This discretion is self-binding through the CISAF and CEEAG communications insofar as the Commission sets out in these communications the conditions under

[48] ECJ, judgment of 18 July 2013 – C-501/11 P para. 68 – *Schindler Holding v Commission*; Gundel, Der prozessuale Status der Beihilfenleitlinien der EU-Kommission (The procedural status of the EU Commission's state aid guidelines), EuZW 2016, 606, 607.
[49] See, for example: Commission Notice, Guidance on the implementation of EU product rules 2016 ("Blue Guide"), OJ 2016, C 272, p. 1; Dingemann, Kathrin / Kottmann, Matthias, Legal opinion on the European system of harmonised standards prepared on behalf of the Federal Ministry for Economic Affairs and Energy, 2020, p. 62.
[50] CFI, judgment of 10 July 2012 – T 304/08, para. 84 – *Smurfit Kappa Group v Commission*.
[51] See explanatory note p. 1.
[52] See CEEAG Communication, para. 405(a) and (b).
[53] CISAF Notice, para. 117.
[54] See CISAF Notice, para. 116.

which it will consider aid to be compatible with the internal market in accordance with Article 107(3)(c) TFEU.

Finally, the Explanatory Note is at the lowest level of this cascade of communications, as it merely defines the terms 'electricity intensity' and 'trade intensity' used in the CISAF and CEEAG Communications. In principle, for reasons of equal treatment and protection of legitimate expectations, the Explanatory Note is therefore subject to the Commission's self-commitment. However, the Explanatory Note's significance in terms of guiding discretion is thus even lower than that of the Communications.

b) Power to deviate from the self-imposed commitment to its own announcements

Deviating from self-imposed commitments made in official statements fundamentally violates the principles of equal treatment and protection of legitimate expectations.[55] However, the Court recognises an exception to this if the Commission *"gives reasons justifying, in the light of those principles, its departure from its own rules."*[56] With regard to this quotation from the judgment, it should be clarified that communications and explanatory notes are not legal norms, but rather merely discretionary statements for the purpose of binding the administration's practice. If there are sufficiently weighty objective reasons, the Commission may therefore deviate from its own published administrative practice. This is also the view taken by the Commission, in addition to the Court: in a decision approving aid, it deliberately deviated from its specific broadband guidelines governing the exercise of discretion, as these were designed for supply-side support models rather than the specific case of demand-side support models.[57] Instead of applying the broadband guidelines in a discretionary manner, the Commission examined the compatibility of the measure with the internal market directly on the basis of its primary law discretion pursuant to Article 107(3)(c) TFEU.

In the event of a sufficiently weighty objective reason, for example because the Commission's statements are not designed for the specific case to be decided, but rather to cover different constellations, a deviation from the administration's self-imposed obligation is permissible with direct recourse to the discretionary power granted under primary law. In order to be able to take account of the specific features of the case to be decided, such a deviation may even be necessary in the light of the EU principle of proportionality.

c) Supplementary interpretation of the explanatory note

To take sufficient account of the characteristics of data centres with regard to the EU's objectives, it may be appropriate to supplement the definition of trade intensity. According to the

[55] ECJ, judgment of 10 July 2012 – T 304/08, paragraph 84 – *Smurfit Kappa Group v Commission*; see also ECJ, judgment of 13 December 2012, C-226/11, paragraph 28 – *Expedia.*
[56] CFI, judgment of 10 July 2012 – T 304/08, paragraph 84 – *Smurfit Kappa Group v Commission*.
[57] See Commission Decision of 7 January 2019, State aid SA.49935 (2018/N) para. 71 – *Greece – Superfast Broadband (SFBB) Project*.

Explanatory Note, *"Trade intensity of a NACE-4 sector is calculated as exports plus imports vis-à-vis countries located outside the EU, divided by turnover in the EU and imports from countries located outside the EU."*[58] Such a transaction-based calculation of trade intensity at Union level would generally result in a trade intensity of less than 5 % for the data centre industry, meaning that it would not meet the eligibility criteria for aid. Accordingly, data centres would not normally be eligible for equal treatment with the economic sectors listed in the CEEAG under paragraph 117 of the CISAF Communication.

The reason for this lies in the data-centric business model of data centres, which generate their direct added value not through the flow of goods, but through the centralised processing of data. Data centres do not produce tradable goods and do not export physical goods but provide services that can be used largely independently of location. Direct value creation arises from the provision of IT infrastructure, which is either leased to companies as physical space for their own operation or actively operated and maintained by the data centre operator itself. In addition, data centres create a high degree of indirect value added, as the data processing they provide is a central functional requirement for numerous business models in all sectors of the economy. This macroeconomic significance of data centres, which amounted to around €250 billion in gross value added for the German economy alone in 2023,[59] is not even remotely reflected in the export- and import-related calculation of trade intensity in the explanatory note and is therefore not currently considered in the decision on eligibility for funding.

This also contradicts the legislative action taken by the European institutions. With the Regulation on a framework for the free flow of non-personal data in the European Union, the EU already established the free flow of data within the Union in 2018, explicitly recognising the economic relevance of data processing as a critical issue for digital technologies.[60] Among other things, recitals (1) and (2) state:

"(1) The digitisation of the economy is accelerating. ***Information and Communications Technology is no longer a specific sector, but the foundation of all modern innovative economic systems and societies.*** *Electronic data are at the centre of those systems and can generate great value when analysed or combined with services and products* [...].

(2) Data value chains are built on different data activities: data creation and collection; data aggregation and organisation; data processing; data analysis, marketing and distribution; use and re-use of data. ***The effective and efficient functioning of data processing is a fundamental building block in any data value chain."***

This legislative line was consistently continued in 2022 with Regulation (EU) 2022/1925 ("Digital Markets Act")[61] , which provides regulatory safeguards for the digital orientation of the European single market and represents a response to the growing importance of the digital economy. The Commission's current plans for a Cloud and AI Development Act, which aims to

[58] Explanatory note on sector eligibility under section 4.11 of the draft CEEAG, p. 1.
[59] See IW Consult, Spillover effects of data centres: Backbone of the AI revolution in Germany, 2024, p. 29.
[60] See Regulation (EU) 2018/1807 of 14 November 2018, OJ L 303, p. 59.
[61] Regulation (EU) 2022/1925 of 14 September 2022, OJ L 265, p. 1.

at least triple the capacity of data centres in the EU by 2030, tie in seamlessly with this and underline the economic and geostrategic relevance of data centres.[62]

It is therefore appropriate to supplement the calculation method in the explanatory note with criteria that adequately reflect the high value added of data centres in relation to the Union's objectives. In particular, consideration should be given to measuring trade intensity as data-specific transaction intensity for data centres on the basis of computing power and the data traffic originating from and entering the data centre.

This provides sufficient objective grounds for basing the assessment of the trade intensity of data centres on a supplementary interpretation of the Explanatory Note, while respecting the principle of equal treatment. This particularly relevant given the limited discretionary significance of the Explanatory Note.

d) Supplementary interpretation of the CISAF Communication

In addition to this functional interpretation of trade intensity, the introduction of supplementary eligibility criteria for data-centric business models may be considered. The criteria of electricity and trade intensity used in paragraph 116 of the CISAF Communication to determine eligibility do not reflect the risks of relocation outside Europe, the associated negative environmental externalities, the geostrategic importance and the economic value added by data centres. Due to their transaction-based export-import approach alone, they are not suitable for providing effective, targeted support for energy-intensive industries that are particularly at risk of relocation to third countries.

This means that the eligibility criteria set out in paragraph 116 of the CISAF Communication need to be supplemented, which can be achieved by way of a supplementary interpretation of the CISAF Communication. A sufficient objective reason for deviating from the statement lies in the dysfunctionality of the current criteria for data centres. In any case, the Commission has expressly stated in the CISAF Communication that the risk of relocation outside Europe does not in fact depend exclusively, but only *"largely"*[63] on electricity and trade intensity.

In addition to the criteria of electricity and trade intensity in paragraph 116 of the CISAF Communication, further criteria must therefore be added to achieve the Union's objectives of avoiding negative environmental externalities. which reflect the geostrategic importance and economic value added of data traffic and data processing-centric economic sectors that are subject to particular risks of relocation outside Europe. For data centres in particular, the eligibility criteria require supplementation on the basis of data traffic and data-processing-specific parameters.

[62] Cloud computing, https://digital-strategy.ec.europa.eu/en/policies/cloud-computing, last accessed on 20 January 2026.
[63] CISAF Communication, paragraph 116.

e) Direct application of Article 107(3)(c) TFEU

As an alternative to the supplementary interpretation of the Explanatory Note and the CISAF Communication, direct application of Article 107(3)(c) TFEU may be considered in order to give practical effect to the Union's objectives. Discretionary statements such as the communications and, in particular, the highly technical Explanatory Note are only applicable if they are designed for the specific case to be decided.[64] When adopting the CISAF Communication, the Commission does not appear to have expressly considered the economic and geopolitical significance of industries with data-centric business models. As the method for determining electricity and trade intensity and the economic sectors examined in the explanatory note show, the communication is geared towards promoting traditional industrial companies. The enormous added value and strategic importance of data centres are not not expressly reflected therein.

Insofar as the method for determining electricity and trade intensity should not be adapted to the data-centric business models of data centres according to the Explanatory Note, which is geared towards promoting traditional industrial companies, the direct application of Article 107(3)(c) TFEU offers a legally sound alternative means of support for effectively implementing the Union's objectives in practice.

Accordingly, the eligibility of data centres for aid would need to be assessed directly on the basis of the balancing test set out in paragraph 22 of the CEEAG Communication – which corresponds to *the acquis communautaire* of primary EU law on Article 107(3)(c) TFEU – and, as explained in the expert opinion, may generally be regarded as fulfilled.

3. Conclusion

For reasons of regulatory coherence, proportionality and practical effectiveness in preventing investment relocations to non-European countries in order to avoid negative environmental externalities, data centres may be regarded as falling within the scope of the CEEAG and thus eligible for funding on the basis of a functional, complementary interpretation.

The calculation method in the Explanatory Note may require supplementation with eligibility criteria based on data traffic and data processing parameters that adequately reflect the high value added of data centres in relation to the Union's objectives.

For example, trade intensity should be measured as data-specific transaction intensity for data centres on the basis of computing power and the data traffic originating from and entering the data centre.

Alternatively, a supplementary interpretation of the CISAF Communication incorporating these eligibility criteria reflecting the specific value added by data centres or a direct application of Article 107(3)(c) TFEU would be appropriate.

[64] See Commission Decision of 7 January 2019, State aid SA.49935 (2018/N) para. 71 – *Greece – Superfast Broadband (SFBB) Project*.

(University Professor Dr. Christian Koenig)