European Data Centre Association

Feedback on the draft delegated regulation on a Union rating scheme for data centres

Introduction

The European Data Centres Association (EUDCA) has been representing the interest of the data centres operators in Europe since 2011. **The EUDCA is the voice of the colocation industry**, with a diverse membership which includes European and international operators, vendors, and a network of national trade associations.

All along the consultation process, the EUDCA has proved to be a reliable stakeholder, supporting the European Commission's endeavour to make the data centre industry more sustainable. As **a founding member of the Climate Neutral Data Centre Pact** (CNDCP), the **EUDCA is at the forefront of the sustainability efforts of the data centre industry**. The draft delegated regulation has been carefully analysed by our network of members, and our feedback represents the diversity of our ecosystem.

As a necessary foreword, the EUDCA reiterates that data centres operators are not trained data collectors and aggregators. We therefore regret that the Commission is making the **fundamental mistake of requiring data centre operators to request, collect and store their customers' data**, as this goes against our fundamental business model, and contractual obligations. It also bears repeating that regulations should not require regulatees to report matters outside of their control.

Moreover, the regulation will **immensely increase our industry's reporting burden**. The impact the EED will have on data centres cannot be understated: significant time, resources and effort will be spent by operators, but also customers, to comply with reporting obligations. Considering this additional burden, our feedback has been carefully crafted to not only further the sustainability objectives of the EED, but also to keep the reporting scheme workable for reporting entities.

The **EUDCA welcomes this delegated regulation, which brings much needed transparency to our sector**, as well as the opportunity to provide feedback.

Executive Summary

- The EUDCA reiterates its support for a lower reporting **threshold of 100kW** which would be more adequate to improve the sustainability of the industry, as smaller data centres are generally less energy efficient.
- The **timeline for the reporting obligations** should be clarified, as the current provisions are unclear.
- **We regret that data traffic has been included** in the reporting scheme, since data traffic has little to do with the sustainability of data centres. As it is not feasible for colocation data centres to comply with these reporting requirements, the **Commission should introduce an exemption** for colocation data centres.
- The provisions for reporting on ICT equipment data should be rephrased, to clarify their scope for colocation operators. Moreover, the delegated act should mandate customers to communicate their data and **protect reporting entities from unfairly being held liable for non-compliance**.
- The draft delegated regulation includes **new KPIs** which are not yet established in the industry, and on which **stakeholders have never been consulted** before. These KPIs should not be part of the reporting scheme.

I. Feedback

Reporting threshold – *Art. 1*

The EUDCA's long-held position is that **a lower reporting threshold of 100 kW would be better suited** to fulfil the objectives of the EED. The rating scheme has drifted away from targeting the worst performing element of the sector where the greatest efficiency improvements could be achieved at least cost and is becoming a data gathering exercise.

A lower threshold **would incentivise the adoption of energy-efficient technologies and practices** in the EU as a whole. Indeed, in some EU countries, data centres with a capacity above 500kW are rare. As it stands, the EED will therefore have negligible effect in these markets.

A higher threshold of 500 kW covers bigger data centres which have already put in place energy-efficient systems and practices. By excluding smaller data centres from this scheme, **the Commission is letting the most inefficient data centres fly under its radar**.[1]

It is estimated that since 2020, the industry PUE has averaged between 1,55 and 1,59. This high average is due in part to smaller facilities, for which investing in energy-efficient systems and practices is less likely to yield a significant return. On the contrary, larger colocation facilities outperform the industry average, as they are designed with a PUE of 1,4 and below**. A lower threshold would bring much needed incentives for lower performing data centres to remedy this situation**.[2]

➔ **EUDCA recommends lowering the threshold to 100kW.**

➔ **As the Commission evaluates the reporting scheme by May 2026, we urge European decision-makers to extend its scope by lowering the threshold.**

Timeline for reporting obligation – *Art 3.5 §1*

The wording of the first paragraph is unclear, as it could be interpreted as applying to all data and KPIs to be reported on, or only the KPIs which relate to customers' information. For reporting data centre operators, the scope of this provision makes a world of difference. The wording should therefore be edited as follows, to clarify that the **2026 provision applies to all information to be reported** on by colocation data centres:

> *"By 15 May 2026 colocation and co-hosting data centre operators shall, gather, publish, and communicate to the European database on data centres **all** the information and key performance indicators referred to in paragraphs 1 and 2~~, covering all their co-location and co-hosting customers at the co-location or co-hosting data centres they manage~~".*

Moreover, the wording as it stands brings confusion when read in conjunction with Annex II 2. a) and b). In said Annex, the provisions on reporting 90% of new equipment is at odds with the wording "*all their… customers*" in article 3.5.

Most importantly, the 2026 timeline is consistent with the **industry's readiness to accurately report the data**. Indeed, **additional time will be needed** to put in place the systems and internal processes to gather all the data

[1] Smaller data centres are likely to be inefficient, particularly if the data centre is not being run as a business and is not obliged to report. While these facilities are individually insignificant, observers are concerned that, mindful of the proportion of activity still being conducted in small, on-premise sites, their aggregate energy consumption could dwarf that of the commercial sector. Evidence from the EU-funded EURECA project, which analysed around 350 on-premise public sector data centres in 2018, shed some light on this under-reported and unregulated cohort. The project discovered average PUE of around 5, which means that for each KWh used by the IT, there is a facility overhead of 4KWh. Compare that to PUE in large, purpose-built facilities, which is unlikely to be above about 1.5 giving therefore a facility overhead of 0.5. Moreover, large operators have already committed to more stringent PUE thresholds, and many are already out-performing even these. This seems to indicate that the on-premise approach to computing is at least eight times less efficient than a larger scale approach. This comparison does not include the IT, and the same study revealed that utilisation (how busy the servers are) and computational efficiency (how efficient the processors are, which tends to decline with age) were also low. See project report at EURECA (dceureca.eu)

[2] Uptime Institute – Intelligence Note Details, "Large data centers are mostly more efficient, analysis confirms", 23 November 2023 (link)

needed, particularly with regards to ICT equipment. A recent study shows that the majority of data centre operators are not yet ready to comply with such reporting requirements.[3]

➔ **The wording of the article should be improved to clarify the timeline for the reporting obligations, which start kicking in by May 2026.**

Reporting on unavailable data – *Art 3.5 §2*

The EUDCA welcomes the second paragraph which allows reporting entities to declare the data that they could not report for reasons outside of their control. However, the information should not be reported indicating the percentage of the computer room floor area, which has little relevance. Data centre operators could instead report this data in percentage of customer contracted power out of total power used by the data centre. It would not be possible for operators to report the exact power usage for each of their customer, but the contracted power would already be a more relevant metric than the computer room floor area.

Moreover, the Commission should explicitly address the **temporal mismatch between the calendar of this EU reporting scheme, and the reporting cycles of customers**. Indeed, some data centre customers must also comply with their own reporting obligations, and it is almost certain that these will not always be aligned with the reporting scheme for data centre operators. In such a scenario, the delegated act must specify whether data centres should approximate their customers' data, or if they should report information which does not reflect the calendar year of their own reporting exercise.

➔ **The scope of the provision covering data that cannot be reported should be clarified. Moreover, it should be assessed in relation to customer contracted power.**

➔ **The issue of temporal mismatch between different reporting cycles should be addressed by indicating how reporting entities must report on customers' data which do not cover a calendar year.**

ICT capacity indicators – *Annex II 2. (a) (b)*

Reporting on ICT equipment data is **especially difficult for colocation data centres, as operators do not own nor have access to their clients' ICT equipment**. Reporting on ICT equipment fundamentally goes against the colocation model, as data centres operators will be required to request, collect and store their customers' data, which requires further legal and/or contractual changes.

Nonetheless, the EUDCA welcomes the 90% provision for colocation, which gives reporting entities the leeway to not collect and store some of our customers' most sensitive data. One important reason is that our industry is battling off cybersecurity attacks daily. However, we urge the Commission to improve the wording, and **make it clear that the 90% provision applies to new equipment only**, and not to all the equipment in the data centre.

To make it abundantly clear that the rules in the second and third paragraphs are cumulative, both third paragraphs should be edited as follows:

> *"… by extrapolating the value that corresponds to at least 90% of the installed information technology power demand of all installed servers/storage equipment referred to in the second paragraph."*

Moreover, EUDCA reiterates that as they stand, contractual frameworks between colocation operators and their customers do not allow for the collection of this data. We understand that national legislations are expected to

[3] Uptime Institute – UI Intelligence Data Report 120, "Tracking of IT equipment varies widely and often falls short", December 2023 (link)

override this when transposing the EED. However, we urge the Commission to make explicit mention of this situation, by **including an obligation on data centre customers to communicate their data** where it is not protected by trade and business secrets as laid out in Article 12(1) of the EED. Alternatively, the Commission could include an **obligation on Member States to address this legal uncertainty** in their transposition, to make sure that reporting entities are communicated the data they need to report and are not unjustly at risk of non-compliance.

Consequently, EUDCA also reminds the Commission of the **liability risk** that the current draft framework imposes on colocation data centres. Should the quality of the ICT data fall below the expected standard, colocation data centres should not unjustly be held accountable for non-compliance with their reporting obligations. The reporting scheme should **explicitly protect data centre operators from being held liable** for the quality of the data communicated to them, or withheld from them, by third parties.

Finally, we urge the Commission to **keep colocation customers' reporting burden to a minimum,** as these have the direct consequence of **upsetting the level playing field between** competitors in our industry.

➔ **The wording of the 90% provision should be improved to make it clear it only applies to new equipment.**

➔ **The delegated act should ensure that reporting entities are not at risk of non-compliance for not reporting data they do not have, by ensuring that customers are obliged to communicate their data.**

➔ **ICT utilisation should be kept out of the reporting scheme - No changes.**

Data traffic – *Annex II 3. (a) (b) (c) (d)*

Data traffic within a data centre has **little to do with the sustainability** of its operations and its energy consumption, as additional data transport typically does not require extra energy.[4]

Many reporting entities **do not have access to this information**, including colocation data centres and enterprise data centres. Reporting this data is **not doable in practice**.

Incoming and outgoing data traffic for colocation customers is **very complex**: the different layers and multitude of parties involved make it **impossible for colocation operators to accurately report**. Colocation customers get connectivity provided most of the time via ISPs and carriers that are situated in a Meet Me Room. Connectivity is provided via Ethernet, IP, Dark fibres, or satellites, among others. All are connected via cross connects, unmonitored fibres and UTP, towards the customers racks in the data centre. Other ways of connectivity are via cross connects between customers within the data centre.

In the colocation model, each customer would first need to request this information from their network provider, to then communicate it to the reporting entity. Moreover, network providers can and likely will, oppose communicating this data, and claim it as proprietary information, considering its commercially sensitive nature.

We remind the Commission that in light of these obstacles, the preparatory reports recommended not to include data traffic in the reporting scheme.[5]

[4] Why is data traffic not a useful sustainability indicator? Because data centres do different jobs. For example, high performance computing (HPC) involves very high quantities of data processing, very high utilisation of servers, high energy intensity and high value but low volume output. Weather maps for instance use HPC, due to the size and complexity of the models and the sheer volume of data. However, their data traffic is relatively low. At the other end of the scale, operations such as video streaming, where there is storage but hardly any processing, deliver enormous quantities of content. This data centre would have a high storage capacity, probably lower utilisation but very high levels of digital output as content is streamed. The metric would not give an indication of efficiency because the data centres are performing different functions.

[5] Task A report: Options for a reporting scheme for data centres, section 9 "Key performance indicators and methodologies for energy performance and sustainability of data centres" (link)

Carrier neutrality is a cornerstone of our operations. **Carrier neutral data centres** have no view on the connectivity of their customers, which remain entirely in their hands. The colocation model does not allow operators to report on data traffic.

➔ **Colocation data centres should be explicitly exempted from reporting on data traffic. Reporting on data traffic is not doable, by virtue of the colocation model, and including it will render full compliance with the reporting scheme impossible to achieve.**

Lack of stakeholder consultations

We urge the Commission not to include data points and KPIs on which stakeholders have not been consulted. This applies in particular to the following sections:

- Annex I 3. (d) total number of racks
- Annex II 1. (f) (g) (h) KPIs on electrical grid functions

In particular for KPIs on electrical GRID functions, we warn the Commission of the confusion these will bring, as these KPIs have not been clearly defined and assessed. It is preferrable not to include them in the reporting scheme as these standards are not clear yet.

➔ **The delegated regulation should not include information on total number of racks and KPIs on electrical grid functions, as stakeholders have not been consulted on these.**

II. Technical comments

This section contains a list of technical errors and omissions which should be corrected in the final delegated act. These are listed in chronological order, as they appear in the delegated Regulation and its Annexes.

Article 2 (3) 'colocation data centre': The specification that colocation data centres must have "*multiple*" customers fails to capture the entirety of colocation data centres. Some data centres are single tenant and are not however enterprise data centres. The definition should be as follows: "*means a data centre in which ~~multiple~~ customers install…"*

Annex I 2. (d): The wording for the domain of control on racks is unclear, as one could own the physical metal shell of the rack but not have access to it. The avoid confusion, the text should specify if it refers to the management of the deployment or racks, or if it refers to having access to the racks.

Annex II 1. (a): The text should read "*CEN/CENELEC EN 50600-4-2 standard or equivalent*", as some operators use other international standards, such as ISO. This would also bring legal consistency to the text, as all other provisions in the delegated act accept standards equivalent to EN 50600.

Annex II 1. (b): Data centre total floor area should explicitly exclude roof area used for plant, as well as external plant area. Currently, the text excludes them by omission, but the wording should make it clear.

Annex II 1. (d): The wording for the third paragraph needs to be clarified. The calculation described only applies to cooling that has been procured from a third party. Therefore, the text should read *"shall be measured using heat meters at the boundary of the data centre"*.

Annex II 1. (e): The first paragraph should specify which category reporting entities should be measuring (category 1, 2 or 3). The diagram illustrates the measurement according to category 1, which should be the one explicitly included in the first paragraph. The second paragraph refers to the category 2 methodology. For this reason, the Figure 1 diagram should feature both measurement points, but it does not. It should therefore be replaced with the diagram below.

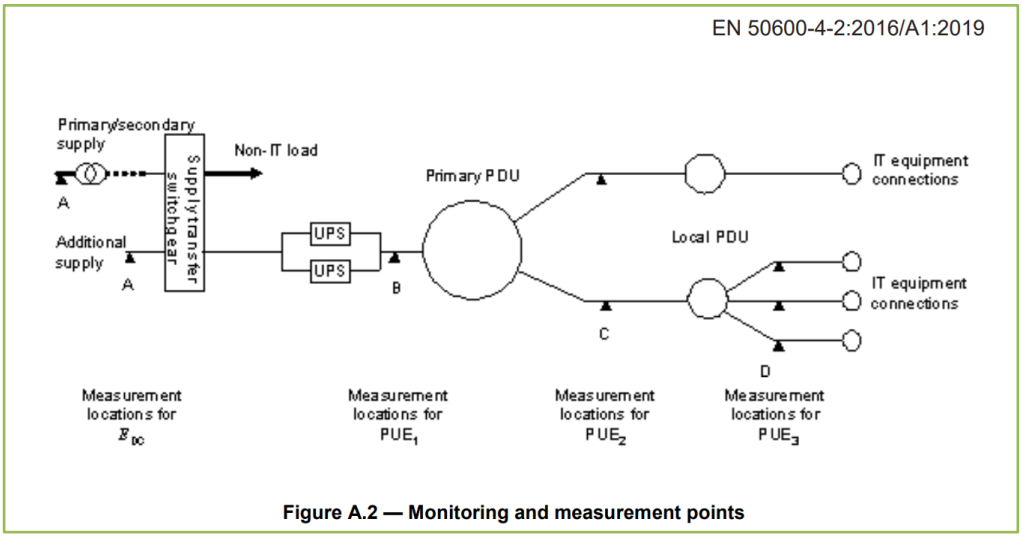

Figure A.2 — Monitoring and measurement points

Annex II 1. (f): The wording is unclear. Should operators provide a list of types of grid functions provided?

Annex II 1. (g) (h): EUDCA members expressed doubt as to the usefulness of these metrics. Measuring in kWh would be more useful.

Annex II 1. (I): The text is very clear, but the diagram associated to it (Figure 3) is wrong, as it does not show a heat exchanger at the data centre boundary. The diagram below would better illustrate this point, with the measurement taking place at point (F).

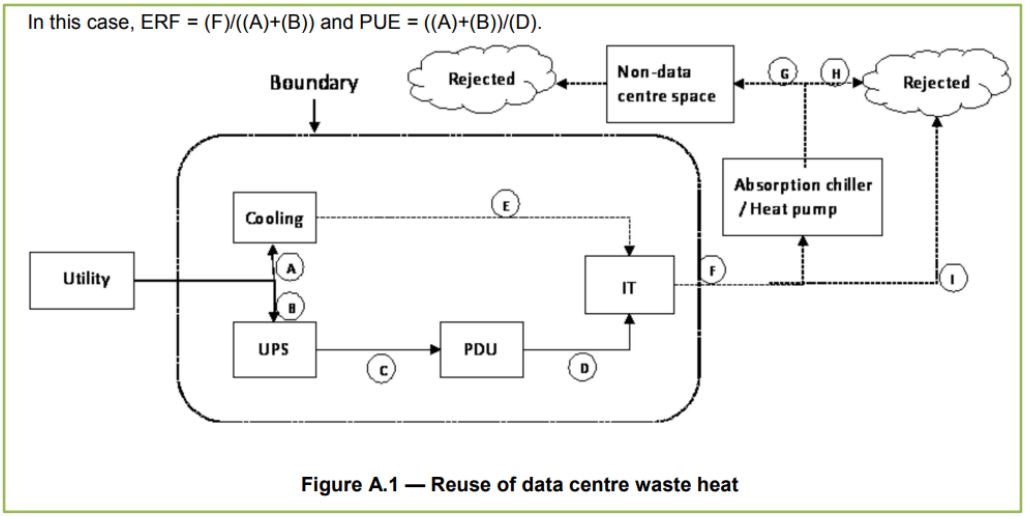

Figure A.1 — Reuse of data centre waste heat

Annex II 1. (m): The section title on Rated cooling capacity ("RCC") is inconsistent with the text, which describes something else. RCC should be defined as the sum of rating cooling capacity at n level of redundancy, with n already being defined in the last paragraph of Annex I 3.

Annex II 1. (n): The wording should be made clearer, as many data centres use several types of refrigerants. For example, the text could read "*Type(s) of refrigerant(s)*". Alternatively, if only one type of refrigerant should be reported, then the text should specify if the main refrigerant is defined in terms of GWP, tons of carbon or the largest one on site.

Annex II 1. (o): As the text refers to degree days, it should further specify the base temperature. Open access sources are not based on measurements on site. As a reference, in the CNDCP, the PUE is defined on the basis of degree days, and the base temperature value is set at 21°.

Annex III (a): The formula for Power Usage Effectiveness is not wrong, however, if refers to the value of E_{IT} of Annex II 1. (e), for which we have pointed out inconsistencies with the categories used in the text and shown in the diagram. Therefore, this must be addressed so that the PUE is calculated correctly.

Annex III (c) (d): For both Energy Reuse Factor (ERF) and Renewable Energy Factor (REF) the formulas are wrong. The denominator of the fraction should not be E_{IT}, but E_{DC}, total energy consumption as defined in Annex II 1. (d).

III. Additional questions

Finally, the EUDCA would like to submit additional questions that have arisen during our internal consultation process. Some of the provisions in this draft delegated regulation should be further clarified, and some terms further defined: as they stand, the extent of some obligations are unclear.

Structure or group of structure

Reporting entities are expected to report whether they are one "structure" or "group of structures" - Annex I 1. d) – but these notions are not defined in the delegated regulation. This can lead to confusion, so clarification is needed (buildings, modules in case of modular datacentres...).

Total number of modular capacity steps or separately provisioned halls

The delegated regulation should clarify what it regards as "modular capacity step" and "separately provisioned halls". Do they respectively refer to the measurement in kW of rated IT load as described in Article 2 (15), and the number of Data Centre computer rooms as described in Article 2 (12)?

EN50600 equivalent standards

The delegated regulation does not specify which standards would be regarded as equivalent to EN50600. It is assumed that ISO, at least, should be regarded as equivalent, but the question remains. This can cause confusion when comparing data, and uncertainties in the aggregation of data.