EU GPP comments form

No.	Reference: - document - section/task - criterion - page	Subject of the comment	Comment
		General	• In general, we consider that the second draft proposals are a significant improvement on the first draft and welcome the changes. Thank you for listening. • We are still concerned that the proposals are "rounding up the usual suspects" instead of targeting the areas where there is most scope for improved energy efficiency. Proposals should focus on approaches that deliver the greatest reductions in energy use for a given compute function or application, rather than on making very inefficient operations slightly less inefficient. We would like to see more on right sizing, or on other qualitative measures and too much emphasis on the performance of individual components. You might have a very efficient car but if you drive it everywhere in second gear it will perform much worse than a conventional vehicle. • There is confusion in terminology between data centres and server rooms but we strongly welcome the explicit inclusion of server rooms in the proposals. Many of the facilities described as data centres are in fact server rooms. • If server rooms only house 15% of servers why are the remaining 85% being brought under the proposals? Would it not be more appropriate to limit the proposals to small data centres and server rooms where the market forces that drive efficiency among commercial operators do not apply? • We would like to see much more focus on consolidation. Since this single action has the greatest potential to save energy, it should be a requirement under the proposals. "Equip a new server room" should be a last resort for procurers after other options have been explored. There should be a requirement to provide robust justification for equipping a new server room in preference to outsourcing or consolidation.
2	18-19	Scope	• We agree that the scope should exclude construction because the in use phase energy consumption is so dominant.
3	Page 28, Table 4		We are not sure why criteria 2.1, 2.2, 3.1 and 3.2 could not be applied in server rooms.
4	Page 29 Table		We are not sure why criteria 2.1 could not be applied to operation and maintenance as well as design and build

5	Page 31-35	Data	• We are sceptical of the accuracy or usefulness of the market data being presented which should not be described as anything more than estimates based on assumptions and modelling. Both the assumptions and the modelling should be transparent. • Predictions are made about data centre energy use up to 2030. We understand that there may be pressure to seek justification for regulation but in reality everyone knows that these predictions are meaningless and should be removed. Historically, predictions about future energy use of data centres have been thoroughly discredited. Predictions over five years ahead should never be used as a basis for policy making.
6	Page 45	Priority ranking	• While we know that the energy mix has the biggest impact on the carbon footprint of a data centre, it is worrying to see this at the top of the priority list because energy purchasing decisions should never be a substitute for efficiency measures. • There is also the problem that in centrally controlled energy markets buying "green" power will have no impact on investment in renewables or additionality. • Moreover, an increased demand for renewable power can drive up carbon emissions in smaller energy producing states as other users are shifted onto non-renewables – as a recent government report in Denmark concluded. Reference supplied if needed. This provision could also favour one nation state over another.
7	Page 47	Right sizing	• We would expect right sizing to have a higher priority.
8	Page 53	SERT	• We understand that SERT rates servers at different levels of utilisation from 25% up to 100% so is not weighted to 100%.
9	Page 57, 59, 60	Focus on Idle power	• Setting Idle power limits is not a productive means of distinguishing server efficiency, may lead to perverse outcomes and reduce data centre efficiency.
10	Page 58	SERT/ETSI	• We support reference to existing standards (ETSI EN 303 470)
11	Page 83	TS1.3.1	• "Both new and existing servers must deliver comparable workloads" does not make sense. New servers tend to have greater processing power and there should be no assumption that a 1 for 1 replacement is acceptable: it would most likely lead to significant over provisioning and waste.
12	Page 84	TS 1.3.2	• We do not agree that end users should be dismantling equipment. This is a specialist job.

13	Page 86	SC1.3.4	• We support reference to existing standards but do not understand the reference to emissions in the title.
14	Page 89	ASHRAE	• We do not believe there is any need to test at elevated temperatures.
15	Page 92	TS 1.4.1	• We are not sure that the liquid cooling range needs to be restricted to 17 degrees C in the core criteria, but don't have any particular objection.
16	Page 110	Reuse of waste heat	• We welcome reference to the existing REF. We agree that heat reuse should not be included in core criteria because of the dependency on existing external infrastructure. • There are cases when it is costly and energy intensive to concentrate and condition the low grade heat coming from data centres so it is important to ensure that this requirement does not lead to perverse outcomes. • We think the proposals might be too proscriptive and exclude more innovative ways of recycling waste heat that may not include a district heating system.
17	Page 118	TS2.3.1	• We welcome reference to EN 50600-2-3 and EU CoC.
18	Page 121	Section 3	• Renewable power purchase has no impact on data centre performance. We completely disagree that renewable energy should form part of a chapter on data centre performance. • See our earlier comments on potential perverse outcomes. Life cycle assessment may indicate that power source has a major impact but it does not take into account the way that an energy market operates and this is a very significant failing. • We support reference to relevant standards. • We agree that purchasing renewables may give signals to customers and governments but unless that purchase creates additionality or drives direct investment in renewables then it simply displaces the activity.