EU GPP Criteria for data centres

Overview of third draft criteria areas and proposals (v3.0 November 2018)

An overview of the applicability of the criteria proposals for the specific procurement routes a public organisation wants to follow is provided on subsequent pages. The aim is that a public organisation can easily identify criteria suitable for use for the specific tender.

For a more detailed description of the applicability of each criterion please check the paragraph V of Introduction in the TECHNICAL REPORT - Draft third criteria proposals.

1. BUILD A DATA CENTRE / EQUIPPING A SERVER ROOM / DATA CENTRE Equipment of a server room / data Construction of a new DC centre TS1.1.1 – AC1.1.1 – AC1.1.2 – Server Energy Efficiency SC2.3.1 - Cooling Energy Management competences TS 1.3.1 Design for repair and upgrading of servers / TS2.3.1 Environmental monitoring system data storage products TS2.3.2 Cooling System Best Practices SC 1.3.1 Operation of Restricted Substance Controls (RSCs) Connection to a district heating network TS2.2.1 - AC 2.2.1 Reuse of waste heat TS1.3.4 IT Equipment Operating Range AC2.3.1 - Cooling system energy consumption Procurement of services for the end of life TS1.3.2 – AC1.3.3 End of life management AC2.1.1 Designed Power Utilization Effectiveness (PUE) CPC2.1.1: Test of PUE at handover AC3.1.2 Procurement of on- or near-site, directly supplied renewable energy AC3.2.1 – CPC3.2.1 Global warming potential of mixture of refrigerants In the case that new IT equipment is purchased see also the criteria set for IT equipment

Figure 1: Applicability of GPP criteria to the building a new data centre or equipping a server room

Expansion of existing building with new data center and server rooms infrastructure*	IT Consolidation / Virtualization Services	Consolidation of existing distributed server rooms in a new enterprise DC
SC2.3.1 – Cooling Energy Management competences	SC1.2.1 Server utilisation – Competences	SC2.3.1 – Cooling Energy Management competences
TS2.3.1 Environmental monitoring system TS2.3.2 Cooling System Best Practices	AC1.2.1 Server utilization — Anticipated Utilization Rate	TS2.3.1 Environmental monitoring system TS2.3.2 Cooling System Best Practices
Connection to a district heating network TS2.2.1 – AC 2.2.1 Reuse of waste heat	CPC1.2.1 Monitoring of the utilisation rate	Connection to a district heating network TS2.2.1 – AC 2.2.1 Reuse of waste heat
AC2.3.1 – Cooling system energy consumption	In the case that new IT equipment is purchased see also the criteria set for IT equipment	AC2.3.1 – Cooling system energy consumption
AC2.1.1 Power Utilization Effectiveness (PUE) Improvement potential CPC2.1.1: Test of PUE at handover	In the case that old equipment is decommissioned see also the criteria for the end of life services	AC2.1.1 Designed Power Utilization Effectiveness (PUE) CPC2.1.1: Test of PUE at handover
AC3.1.2 Procurement of on- or near-site, directly supplied renewable energy		AC3.1.2 Procurement of on- or near-site, directly supplied renewable energy
AC3.2.1 – CPC3.2.1 Global warming potential of mixture of refrigerants		AC3.2.1 – CPC3.2.1 Global warming potential of mixture of refrigerants
In the case that new IT equipment is purchased see also the criteria set for IT equipment		Procurement of IT consolidation services SC1.2.1 – AC1.2.1 Server utilisation CPC1.2.1 Monitoring of the utilisation rate
		In the case that new IT equipment is purchased see also the criteria set for IT equipment

Figure 2: Applicability of GPP Criteria to retrofitting, expansion, consolidation and virtualization services (*this includes retrofitting such as upgrading electrical equipment or cooling system optimization)



Figure 3: Applicability of GPP criteria to hosting and cloud services.

- * In case of cloud services the environmental performance metrics shall be provided as an aggregated value and the following conditions shall be met during the contract performance:
- the list of data centres sites involved in the provision of the service has to be disclosed
- the service provider shall report to the major changes such as having the services delivered from another data centre or undergoing major replacement of equipment

4. OPERATION AND MANTEINANCE Enterprise DC / server rooms operation and Procurement of colocation services maintenance IT SYSTEM SC2.3.1 – Cooling Energy Management competences SC1.2.1 Server utilisation - Competences IT SYSTEM AC2.1.2 PUE Improvement Potential AC1.2.1 Server utilization - Anticipated Utilization Rate CPC2.1.2: Monitoring PUE CPC1.2.1 Monitoring of the utilisation rate IT SYSTEM In the case that new IT equipment is purchased see also the criteria set for IT equipment AC 2.2.1 - CPC2.2.1 Reuse of waste heat IT SYSTEM In the case that old equipment is decommissioned see also the criteria for the end of life services CPC2.3.1 – Cooling system energy consumption M&E SYSTEM AC2.2.2 - CPC 2.2.1 Energy Reuse Factor SC2.3.1 - Cooling Energy Management competences M&E SYSTEM AC3.2.1 – CPC3.2.1 Global warming potential of mixture of refrigerants AC2.1.2 PUE Improvement Potential CPC2.1.2: Monitoring PUE M&E SYSTEM AC 2.2.1 - CPC2.2.1 Reuse of waste heat M&E SYSTEM CPC2.3.1 - Cooling system energy consumption M&E SYSTEM AC2.2.2 - CPC 2.2.1 Energy Reuse Factor M&E SYSTEM AC3.2.1 – CPC3.2.1 Global warming potential of mixture of refrigerants

Figure 4: Applicability of GPP criteria to operation and maintenance and procurement of colocation services.