TECHNICAL INSTRUCTIONS FOR THE APPLICATION **OF SUSTAINABILITY CRITERIA TO ICT EQUIPMENT**





AREAS OF APPLICATION AND SCOPE



MULTIFUNCTION EQUIPMENT

LAPTOPS

SUSTAINABILITY ASPECTS

Reduce equipment energy consumption





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TECHNICAL INSTRUCTIONS FOR THE APPLICATION OF SUSTAINABILITY CRITERIA TO ICT EQUIPMENT

Barcelona City Council, in accordance with the strategies outlined in the 2012-2022 Citizen Commitment to Sustainability and the Plan for Energy Self-sufficiency, is working towards minimising the environmental impact of the use of ICT equipment needed for the municipal services. These technical instructions are an answer to the 2013 Government Measure on Responsible Public Procurement using Social and Environmental Criteria and the Mayoral Decree on Responsible Public Procurement using Social and Environmental Criteria of 20 November 2013, which provides for the publication of technical instructions that define specific environmental criteria that must be applied in the purchasing and contracting of groups of products and services that have been defined as priorities, which include ICT equipment.



1 SUBJECT MATTER

These technical instructions aim to define, in accordance with the Mayoral Decree on Responsible Public Procurement using Social and Environmental Criteria, the criteria for environmental clauses in the procurement of ICT equipment (for any of the possible procurement types: purchase, leasing or renting).

To achieve this objective, these instructions:

- a. Define the different types of ICT equipment covered by the instructions.
- b. Define the priorities in their procurement.
- c. Define the environmental criteria to be applied in the acquisition of the different types of equipment.
- d. Establish the monitoring system.

2 AREA OF APPLICATION

2.1 Subject area

In accordance with the Mayoral Decree on Responsible Public Procurement using Social and Environmental Criteria these instructions must be complied with in any public sector contracts signed by Barcelona City Council and its dependent organisations with the power to adjudicate (contracting authorities), whose contractual subject matter is outlined in Section 3, "Scope".

2.2 Inclusion in procurement documents

All contracting bodies must comply with these instructions, and must ensure that, in all cases and according to the type of equipment, the basic environmental criteria are applied.

2.3 Exceptions and justification report

In accordance with the Mayoral Decree on Responsible Public Procurement using Social and Environmental Criteria, the competent contracting bodies or those responsible for contracting may consider that the contract's characteristics are not suitable for including of some or all of the environmental clauses set out in these instructions. In these cases, the competent contracting body will duly justify this in the procurement record, in accordance with the points set out in Section 4.2.

3 SCOPE

These instructions establish specific criteria for the following ICT equipment:

- Multifunction devices
- Workstations
- Laptops

These instructions apply to contracts for the acquisition of commonly used ICT equipment (including leasing and renting options).

However, these instructions do not apply to small printers or fax machines, mobile phone devices, touch-screen tablets, PDAs or other similar electronic devices, or servers or data

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centres (be they in-house or external). Nevertheless, the priorities and lines of action indicated in these instructions should inform their procurement.

Nor will this apply to contracts for services requiring the use of computer systems such as those described in the scope, although the priorities and lines of action indicated in these instructions should inform their procurement.

3.1 **Definitions**

PThe following definitions are for the types mentioned:

Multifunction equipment

A product comprising a device or combination of integrated devices designed to print images and documents. It includes at least the following functions: printing, copying, scanner and fax. It can be connected to the electricity grid or the data network.

Workstation

A product comprising a computer, a screen, a keyboard and a mouse. The computer is a device for IT operations and data processing with a central processing unit (CPU) and is able to work with input devices and screens. The computer can be a desktop, an integrated desktop (with an all-in-one screen and computer) or a thin client. The screen is the display that shows output information from the computer and it can be separate or integrated into the computer.

Laptop computer

A computer with an integrated screen (at least 9 inches in the diagonal) designed specifically to be portable and to work for long periods of time without needing to be connected to an electricity grid, although it can work with a built in battery or other portable power source.

4 PRIORITIES FOR ICT EQUIPMENT

4.1 **Priorities**

An important aspect of ICT equipment is the fact that its environmental impact is associated to its use phase. As such, in accordance with Barcelona City Council's various commitments to environmental protection, climate change and energy savings and bearing in mind the differences in environmental impact linked to different types of equipment, criteria must be established in order to:

- Reduce the energy consumption linked to equipment use.
- Reduce all types of emissions (sound, electromagnetic, harmful substances, etc.) that might affect the environment or human health.
- Minimise the impact from waste, in particular from consumables, encouraging reuse and recycling as far as possible.

4.2 Justification report

Should the competent contracting body consider the priorities mentioned in the previous section, certain specifications or environmental criteria to be inapplicable, or where the contract itself is considered inappropriate for the application of these instructions, they must indicate and detail their reasons for this in a justification report, stating as a minimum:

- The special requirements and characteristics of the service being contracted.
- A reasoned justification explaining the infeasability of balancing these special requirements with the established environmental priorities, requirements or criteria.
- Or, a financial justification based on the total cost of ownership (TCO).

This report will be made available to those responsible for monitoring these instructions, when required.

5 ENVIRONMENTAL CRITERIA FOR THE PROCUREMENT OF ICT EQUIPMENT

The following table shows the different sustainability aspects for each of the types of equipment indicated:

Multifunction devices	Basic technical criteria
	Energy efficiency
	Sound emissions
	Limiting harmful substances
	Consumables

Workstations	Computers	Screens	
	Energy efficiency	Energy efficiency	
	Sound emissions	Ergonomics and electromagnetic emissions	
Laptops	aptops Energy efficiency		
	Sound emissions		

Ergonomics and electromagnetic emissions

The procurement documents must ensure bidders provide the documentation demonstrating compliance with the criteria stipulated. The following articles indicate when the criteria can be included as technical specification or as award criteria. In the latter case, the contracting body will have to determine the score given for compliance with each of the award criteria and the corresponding evaluation formula.

Where a single tender involves the contracting of several different services, these must be separated in lots and each lot must include the relevant criteria.

5.1 Criteria for multifunction devices

When acquiring multifunction devices, the following basic environmental criteria will apply.

I- Basic technical criteria

The contracting body will establish the following requirements with regard to the equipment's technical characteristics:

- They must be able to print, copy and scan in duplex automatically
- They must guarantee technical compatibility for printing and copying on both 100% post-consume recycled paper as well as non-recycled paper in accordance with standard EN 12281 or equivalent.
- Cartridges (of black and white and colour ink or toner) must be individually and independently exchangeable.
- The equipment have a printing confirmation system compatible with the user cards defined by the City Council.

In case of leasing or renting contracts, the contracting body may require that, on top of the manufacturer's guarantee, the suppliers of the equipment and associated services:

• Guarantee the equipment is compatible and works correctly with remanufactured toner cartridges.





II- Energy efficiency

The contracting body will require the equipment comply with TEC, Typical Energy Consumption, requirements as established by the latest version of Energy Star or equivalent.

III- Levels of sound emissions

The contracting body will require that the sound levels (in LWAd, declared A-weighted sound power level) of multifunction devices be no higher than 75 dB(A), in accordance with standard EN ISO 7779:2010 and EN ISO 9296:1988 or equivalent, as stipulated in the Blue Angel or the Nordic Swan ecolabels.

IV- Limiting harmful substances

The contracting body will require that the equipment does not exceed the levels of emission of harmful substances described in the following table, calculated in accordance with the procedure defined in the Blue Angel ecolabel or equivalent.

Substances	B/W equipment	Colour Equipment
Dust	4 mg/hour	4 mg/hour
TVOC (Total volatile organic compounds)	10 mg/hour	18 mg/hour
Ozone	1.5 mg/hour	3 mg/hour
Styrene	1 mg/hour	1.8 mg/hour
Benzene	<0.05 mg/hour	<0.05 mg/hour

V- Consumables

Where the contract for the supply of multifunction devices includes the supply of consumables (such as in leasing or renting contracts), the contracting body will include as award criteria that bidding companies guarantee the quality criteria and any maintenance tasks they may be required to carry out, and the inclusion of the supply of consumables (toner and ink cartridges) that:

- Are remanufactured and complying with the printing quality requirements defined in DIN standard 33870 (DIN 33870-1 for black and white and 33870-2 for colour) or equivalent.
- Comply with the limits on the presence of dangerous substances defined in Type 1 ecolabels (Blue Angel, Nordic Swan, Austrian Ecolabel) or equivalents.

In the case of contracts involving the replacement of consumables, the contracting body may require as contract performance clause, the successful tenderer to send used cartridges to be remanufactured. To this end, when signing the contract, the successful tenderer should supply the contracting body with documentation confirming an agreement with the company that will remanufacture the cartridges.

5.2 Criteria for workstations

During the acquisition of workstations, the following environmental criteria will be considered.

5.2.a Computers

I- Energy efficiency

The contracting body will require computers to comply with the energy consumption requirements TEC (Typical Energy Consumption) and energy management as established in the latest version of Energy Star or equivalent.



II- Levels of sound emissions

The contracting body will consider as award criteria that sound emissions from computers comply with the limits set by the TCO Certified Desktops and TCO Certified All-in-One PCs standards, as stated in the European Ecolabel, Blue Angel, Nordic Swan or equivalent:

Declared A-weighted sound power level (LWAd)

In standby mode	40 dB(A)*
When the hard disk reader is accessed	45 dB(A)*

*calculated according to EN ISO 7779:2010 and expressed in accordance with ISO 9296:1988 or equivalent

5.2.b Screens

I- Energy efficiency

The contracting body will require screens to comply with the energy consumption requirements TEC (Typical Energy Consumption) and energy management established in the latest version of Energy Star or equivalent.

II- Ergonomics, electromagnetic emissions

The contracting body will require screens to comply with the requirements relating to ergonomics and electromagnetic emissions established in the TCO Certified Displays and TCO Certified All-in-One PCs standards or equivalent.

5.3 Criteria for laptops

In the acquisition of laptops, the following environmental criteria will be considered.

I- Energy efficiency

The contracting body will require computers to comply with the energy consumption requirements TEC (Typical Energy Consumption) and energy management as established in the latest version of Energy Star or equivalent.

II- Levels of sound emissions

The contracting body will consider as award criteria that the sound emissions from computers comply with the limits set by the TCO Certified Notebooks standard, as stated in the European Ecolabel, Blue Angel, Nordic Swan or equivalent:

Declared A-weighted sound power level (LWAd)

In standby mode	35 dB(A)*
When the hard disk reader is accessed	40 dB(A)*

*calculated according to EN ISO 7779:2010 and expressed in accordance with ISO 9296:1988 or equivalent

III- Ergonomics and electromagnetic emissions

The contracting body will consider as award criteria the compliance with the requirements on ergonomics and electromagnetic emissions established in the latest version of the TCO Certified Notebooks and as stated in the European Ecolabel, Blue Angel, Nordic Swan or equivalent.

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5.4 Criteria for the supply of all types of computer equipment

I- Guarantee

In the case of the purchase of IT equipment, the contracting body will require equipment has a minimum warranty of 3 years.

Additionally, the contracting body will consider as award criteria extendings this warranty beyond the 3-year minimum.

II- Installation of new equipment

Installation of the equipment with the energy saving settings, double-sided printing, etc., defined by default, in accordance with the defined user profiles.

The contracting body must include, as contract performance clause, in all contracts for the supply of any type of IT equipment, the requirement for the successful tenderer to leave the area clear of packaging (cardboard boxes, protective wrapping, plastic, etc.) once the equipment has been installed, as well as disposing of any waste generated during the installation (pieces, cables, etc.).

To this end, before installing any equipment, the contracting body and successful tenderer will agree on the methods to be used to remove the different types of waste (paper/ cardboard, plastic, pieces/cables, etc.) and the area or place where each type of waste can be disposed of. Once the installation has taken place, it will be the responsibility of the successful tenderer to dispose of the waste following the agreed protocol.

III- Disposing of old equipment

In cases where the contract provides for the disposal of the old equipment, the contracting body may require equipment in working condition to be donated free of charge to non-profit organisations. If this is not possible, the company will have to ensure it will be handled correctly. Once the equipment has been removed, the successful tenderer must present the corresponding management report, with documents showing what was done with the old equipment (agreements with NGOs, acceptance forms from authorised handlers, etc.).

IV- Supply chain

The contracting body must require bidding companies to commit to working towards adopting measures to guarantee transparency and good working conditions, and must at least comply with the ILO's basic conventions throughout the value chain of the products supplied. To this end, bidding companies should include a document showing the measures they plan to implement to meet this requirement as part of their offer.

The contracting body will set criteria obliging the successful tenderer to sign a commitment to meet and collaborate on any demands and initiatives the City Council may have or undertake in the future.

6 MONITORING SYSTEM

In accordance with the Mayoral Decree on Responsible Public Procurement using Social and Environmental Criteria, the person responsible for the contract will ensure that the awarded company complies with and executes the environmental clauses included in the contract. While those managing the + Sustainable City Council Programme do not have an automated system to monitor the environmental aspects of contracts, the person responsible for the contract will supply the following information via the email address ajuntamentsostenible@bcn.cat:

- Procurement documents.
- A copy of the adjudication report with information on the evaluation of the environmental criteria in the bids.



• A list of the equipment acquired (directly or through leasing and renting) with information on ecolabel compliance (Energy Star, Blue Angel, Nordic Swan, TCO or equivalent).

Those managing the + Sustainable City Council Programme may request additional information from the contracting body.

7 TRANSITIONAL REGULATIONS / ENTRY INTO FORCE

These instructions will enter into force 3 months after being published.

These instructions are not applicable to call for tenders that are already open or concluded, nor to approved procurement documents or to call for tenders pending resolution that are dated prior to these instructions coming into force.

