

EU GPP criteria for "Public Space Maintenance"

Technical report and criteria proposal (2nd draft)

Interactive webinar - 18 June 2018
2nd Ad Hoc Working Group Meeting

The European Commission's
science and knowledge service
Joint Research Centre



Agenda

Machinery and machinery services, vehicles and service fleet

- 1) Opening and welcome
Tour-de-table checking audio connections 10.00-10.15
- 2) Criteria proposal for Machinery Activities - Criteria set presentation and discussion 10:15-11:00
- 3) Criteria proposal for Vehicles and Service Fleet - Criteria set presentation and discussion 11.00-11.50
- 4) Summary and next steps - Wrap up of the webinar 11.50-12:00

EU GPP criteria development

Public Space Maintenance



- The Public Space Maintenance EU GPP Criteria is new!
- It incorporates and extends the scope of the current EU GPP criteria for gardening products and services to cover machinery and machinery services, outdoor cleaning products & services as well as vehicles and service fleet

Project Aim and Objective

- To **deliver EU GPP criteria** that reflect the latest technological developments in the PSM sector while taking into account stakeholder opinions, current legal developments and other GPP initiatives

Website: http://susproc.jrc.ec.europa.eu/Public_space_maintenance/documents.html

Work Plan and Timeline



Scope and Definitions for PSM

- Public spaces for this EU GPP criteria are “..urban areas, pedestrian and vehicular areas, man made green areas, public buildings, natural areas, beaches, lakes, public furniture, etc”
- Public Space Maintenance covers routine maintenance activities and equipment, either of preventive or corrective character, done in either green or built public spaces
- The four groups of products and services included in PSM:
 - Cleaning products and cleaning services
 - Gardening products and gardening services
 - Machinery products and services
 - Vehicles and service fleet

EU GPP Criteria Set Proposal

Type of Criterion & Nomenclature

- Technical specification TS_
- Award criteria AC_
- Contract Performance Clauses CPC_
- Selection criteria SC_

EU GPP Criteria Set Proposal

- Purchase of Machinery for PSM
 - Purchase of Machinery
 - Purchase of Machinery services
- Purchase of Vehicles for PSM
- Cleaning activities for PSM
- Gardening activities for PSM
- Common criteria for Service categories

Scope definition for Machinery and Machinery services

First proposal

- Lawn-mowers (including lawn tractors) and scarifiers
- Chainsaws
- Brush saws
- Trimmers
- Hedge trimmers
- Pruners and similar hand-operated machines
- Leaf collectors and leaf blowers
- Auto-scythes
- Auto-hoes
- Rotary cultivators

Current proposal

- Lawn-mowers (including walk-behind or ride-on grass cutting machines)
- Scarifiers
- Chainsaws
- Brush cutters
- Grass trimmer/grass edge trimmer
- Hedge trimmers
- Pruners and similar hand-operated machines
- Leaf collectors and leaf blowers
- Motor-hoes
- Pedestrian controlled powered tillers
- Shredders /chippers (as for the definition applicable to gardening equipment available in the guidelines of Directive 2000/14/EC)
- Compact sweepers and spreaders

PSM Machinery

Main Environmental Impacts

Machinery

- **Pollutant emissions**
 - ✓ Production of gaseous and particulate pollutant emissions (CO, HC, NOx, PM)
 - ✓ Eco-toxicity impact due to lubricant loss
- **Noise Emissions**
 - ✓ Human health impacts associated with noise emissions
- **Waste generation**
 - ✓ End of life disposal of the machinery
 - ✓ Battery heavy metal disposal
 - ✓ Used oils and lubricants disposal

Overview Purchase of Machinery and Machinery Services

First Proposal / Current Proposal

Hot Spots

Air polluting emissions

Noise emissions

Use phase of sweepers and spreaders

Machinery manufacturing

Battery

Use of Lubricant

Machinery operation and maintenance

Criteria

- Engine exhaust emission
- Air pollutant emission performances*
- × Machinery noise
- GHG emissions of compact sweepers and spreader**
- Water consumption (For compact sweepers using water for dust suppression)
- Distribution performance of spreaders
- Maintenance of the mobile machinery equipment*
- × Machinery Materials
- Battery quality
- Heavy metal content
- Machinery Lubricant
- Optimised machinery use**

* For the purchase of machinery services

** For the purchase of machinery

Purchase of Machinery

Engine Exhaust Emission criteria

Rationale

- The NRMM Stage V set stricter limits for gaseous and particulate pollutant emissions (CO, HC, NO_x, etc) emissions from internal combustion engines.
- The use of electric battery powered machinery eliminates the generation of exhaust air emissions.

Proposal

- It is proposed to promote machinery complying with the emission limits of the most current regulations – at the core level; and those with the lowest possible exhaust emission performance – at the comprehensive level.

Purchase of Machinery

Engine Exhaust Emission criteria

Current proposal

TS 1. Engine Exhaust Emissions

- **Core criteria :** The engine exhaust emissions of the mobile machinery must be in compliance with at least one of the following:
 - i. Euro 6 - Regulation 715/2007
 - ii. Euro VI - Regulation 595/2009
 - iii. Stage V - REG (EU) 2016/1628

Verification:

The tenderer must provide an engine test report or type approval certificate demonstrating that the engine emission performance limits are in conformity with the criterion. The test report must be from an independent body that meets the requirements of EN-ISO/IEC 17025. The type approval certificate must indicate the type approval number of the engine.

Purchase of Machinery

Engine Exhaust Emission criteria

Current proposal

TS 1. Engine Exhaust Emissions

- **Comprehensive criteria** : The machinery must operate with zero exhaust emissions.

Verification:

The tenderer must provide a copy of the type-approval certificate of the power unit of the machinery.

AC1. Zero Exhaust Emissions

- **Core criteria** : Points will be awarded to machines that can demonstrate zero exhaust emissions capability meaning the machinery can run without any direct engine exhaust emission.

Verification:

The tenderer must provide a copy of the type-approval certificate of the power unit of the machinery.

Purchase of Machinery Services

Engine Exhaust Emission criteria

Current proposal

TS5. Machine Engine Exhaust Emissions *(Note: this criterion is not applicable to compact sweepers and spreaders)*

- **Core criteria:** Mobile machinery used in carrying out the service must be in compliance with the following
 - 1) Meet at least Stage V
 - 2) Must be zero exhaust emission
 - 2019: 25% of machinery must be zero exhaust emission
 - 2020: 35% of machinery must be zero exhaust emission
 - 2021: 45% of machinery must be zero exhaust emission
 - 2022: 55% of machinery must be zero exhaust emission
- **Compreh. criteria:** Mobile machinery used in carrying out the service must be in compliance with the following
 - 1) Meet at least Stage V
 - 2) Must be zero exhaust emission
 - 2019: 50% of machinery must be zero exhaust emission
 - 2020: 60% of machinery must be zero exhaust emission
 - 2021: 70% of machinery must be zero exhaust emission
 - 2022: 80% of machinery must be zero exhaust emission

AC3. Machine Engine Exhaust Emissions

- **Core and comprehensive criteria:** Points will be proportionately awarded to the tenderer with a proportion of machinery fleet exceeding the requirements of TS5.

Verification: Same as TS1 together with the list of the machinery intended to be used for providing the PSM service, their certificates of conformity, and copies of the type-approval certificate of the power unit of the machinery.

Purchase of Machinery Services

Engine Exhaust Emission criteria

Current proposal

CPC 1. Machine Engine Exhaust Emissions *(Note: this criterion applies only if the replacement machinery satisfies operational needs as defined by the contracting authority and is agreed with the service provider)*

Core and comprehensive criteria: If the machinery employed for the service is to be replaced during the contract, the replacement must be machinery with zero exhaust emission.

The yearly records on the machinery maintenance and replacement schedule must be made available to the contracting authority for verification purposes. The contracting authority may set rules for penalties for non-compliance.

Explanatory Notes

- The replacement of machinery is recommended when the machinery is approaching the end of its useful life or due to irreparable damage.
- Zero exhaust emissions machinery can run without any direct engine exhaust emission.

Purchase of Machinery Services

Air pollutant emissions criteria - compact sweepers and spreaders

Rationale

- Compact (self propelled) sweepers and spreaders fall into the machinery group and are under the scope of:
 - ✓ the machinery directive 2006/42/EC,
 - ✓ the outdoor noise directive 2000/14/EC, (No 46)
 - ✓ NRMM exhaust emission regulation Reg(EU) 2016/1628

Proposal

- This criterion (applicable only to the engines of compact sweepers and spreaders) seeks to minimize air pollutant emissions by setting technology based requirements which demand less or zero air pollution emissions from engines built into these machinery.
- An award criterion is proposed to reward service providers capable of offering a service fleet with a higher proportion of battery electric compact sweepers.

Purchase of Machinery Services

Air pollutant emissions criteria

Current proposal

TS6. Air pollutant emissions performance *(Note: this criterion is only applicable to compact sweepers and spreaders)*

- **Core criteria** : The air pollutant emissions performance of the engine of the sweepers and spreaders used in carrying out the service must be in compliance with the following:
 - 1) Must be at least Stage IV or Euro 5/V
 - 2) Must be Stage V or Euro 6/VI
 - 2019: **30%** of sweepers and spreaders must meet Stage V or Euro 6/VI
 - 2020: **40%** of sweepers and spreaders must meet Stage V or Euro 6/VI
 - 2021: **50%** of sweepers and spreaders must meet Stage V or Euro 6/VI
 - 2021: **60%** of sweepers and spreaders must meet Stage V or Euro 6/VI
 - 3) Must be zero exhaust emission
 - 2019: **20%** of sweepers and spreaders must be zero exhaust emission
 - 2020: **25%** of sweepers and spreaders must be zero exhaust emission
 - 2021: **30%** of sweepers and spreaders must be zero exhaust emission
 - 2022: **35%** of sweepers and spreaders must be zero exhaust emission

Purchase of Machinery Services

Air pollutant emissions criteria

Current proposal

The tier applicable will correspond to the year that the call for tender is launched.

Where sweepers and spreaders are not certified as meeting Stage IV or higher, but technical after-treatment* has achieved the same standard, this should be documented in the tender.

Verification:

Same as TS1 together with the list of the machinery intended to be used for providing the PSM service, their certificates of conformity, and copies of the type-approval certificate of the power unit of the machinery. For those vehicles having achieved above-mentioned standard following a technical upgrade the measures must be documented and included in the tender, and this must be verified by an independent third party that meets the requirements of EN- ISO/IEC 17025.

Notes: **Engines complying with a prior emission stage to Stage V are allowed to be installed, if they are retrofitted with DPF system certified according one of the following certificates and if they have a gravimetric separation efficiency of at least*

- 90%:*
- *Anlage XXVII Nummer 3 StVZO*
 - *UNECE Regulation R 132, reduction stage 01, Class I or II*
 - *FAD e.V. Siegel (Status February 2015 or newer)*
 - *VERT filter list (Status September 2016 or newer)*
 - *BAFU filter list*

Purchase of Machinery Services

Air pollutant emissions criteria

Current proposal

TS6. Air pollutant emissions performance *(Note: this criterion is only applicable to compact sweepers and spreaders)*

- **Comprehensive criteria** : The air pollutant emissions performance of the engine of the sweepers and spreaders used in carrying out the service must be in compliance with the following:

1) Must be Stage V or Euro 6/VI

- 2019: **50%** of sweepers and spreaders must meet Stage V or Euro 6/VI
- 2020: **60%** of sweepers and spreaders must meet Stage V or Euro 6/VI
- 2021: **70%** of sweepers and spreaders must meet Stage V or Euro 6/VI
- 2022: **80%** of sweepers and spreaders must meet Stage V or Euro 6/VI

2) Must be zero exhaust emission

- 2019: **50%** of sweepers and spreaders must be zero exhaust emission
- 2020: **60%** of sweepers and spreaders must be zero exhaust emission
- 2021: **70%** of sweepers and spreaders must be zero exhaust emission
- 2022: **80%** of sweepers and spreaders must be zero exhaust emission

Verification: Same as TS1 together with the list of the machinery intended to be used for providing the PSM service, their certificates of conformity, and copies of the type-approval certificate of the power unit of the machinery.

Purchase of Machinery Services

Air pollutant emissions criteria

Current proposal

AC4. Improved air pollutant emissions performance

- **Core and Comprehensive criteria:** Points will be awarded in proportion to each percentage improvement upon the minimum technical specification required in TS6.

Verification:

Same as TS6.

Purchase of Machinery and Machinery Services

Compact sweepers and spreaders criteria

Current proposal

Purchase of Machinery:

- **GHG emissions of compact sweepers and spreaders**
Refer to Section 6.1.1 (Vehicles)
The same rationale and criteria as for truck-mounted sweepers and spreaders applies.
- **Water consumption (for compact sweepers using water for dust suppression)**
Refer to Section 6.1.3 (Vehicles)
- **Distribution performance of spreaders**
Refer to Section 6.1.4 (Vehicles)

Purchase of Machinery services:

- **Water consumption (for compact sweepers using water for dust suppression)**
Refer to Section 6.2.3 (Vehicles)
- **Distribution performance of spreaders**
Refer to Section 6.2.4 (Vehicles)
- **Maintenance of mobile machinery equipment**
Refer to Section 6.2.6 (Vehicles)

Purchase of Machinery and Machinery Services

Engine Exhaust Emission criteria

Current proposal

Consultation questions - purchase of Machinery

- What are your opinions about the reformulated criterion at the comprehensive level?
- Are there enough accredited testing laboratories competent for conducting these tests?

Consultation questions - purchase of Machinery services

- Do you agree with the criterion at both core and comprehensive level?
- What could be possible exceptions to the applicability of the current criterion?

Purchase of Machinery and Machinery Services

Engine exhaust emission criteria and Air pollutant emissions criteria

Discussion and questions

Purchase of Machinery

Battery quality criteria

Rationale

- Battery technologies using lead-acid, nickel-cadmium and nickel-metal have a higher environmental impact than lithium-ion and sodium nickel chloride batteries.
- The EU Batteries Directive 2013/56/EU of November 23, restricts the use of cadmium in cordless power tools. A restriction was also applied to mercury use in all batteries.

Proposal

- Alternatives to lead-acid, nickel-cadmium and nickel-metal batteries including cadmium-free substitutes are available on the market, namely nickel-metal hydride and lithium-ion battery technologies, a criterion based on these for batteries is introduced.

Purchase of Machinery

Battery quality criteria

Current Proposal

TS 2. Battery rechargeability and quality

- **Core and Comprehensive criteria:** The battery **must** meet the performance requirements specified below:
 - 1) EN 61951-2 – Nickel-Metal Hydride Batteries
 - 2) EN 61960 – Lithium Ion Batteries

Verification: Tenderers **must** provide a test report verifying battery quality and performance to EN 61951-2 for NiMH or to EN 61960 for lithium ion batteries. **Test reports verifying battery quality and performance to equivalent standards will be deemed to comply.** The test report **must** be from an independent testing laboratory that fulfils the requirements for the competence of testing and calibration laboratories according to EN ISO/IEC 17025.

AC 2. Battery heavy metal content

- **Core and Comprehensive criteria :** Points will be awarded for the provision of battery-powered machinery employing rechargeable batteries with lower heavy metal concentration than those specified below:
 - ✓ Mercury < 0.1 ppm;
 - ✓ Cadmium < 1.0 ppm;
 - ✓ Lead < 5 ppm

Verification: same as above (TS2)

Purchase of Machinery Services

Battery quality criteria

Current Proposal

TS7. Machinery battery rechargeability and quality

- **Comprehensive criteria:** All the machines **must** be equipped with battery systems compliant with the technical specification TS2 in section 5.1.5.

Verification: Same as TS2 in section 5.1.5 together with the list and technical data sheet of the machinery fleet to be employed for the service provision.

AC5. Battery heavy metal content

- **Comprehensive criteria:** Points **must** be awarded to tenders offering a service fleet proportionally to the share of machines that are equipped with battery systems compliant with AC2 on machine battery heavy metal concentration as defined in section 5.1.5.

Verification: Same as AC2 in section 5.1.5 together with the list and technical data sheet of the machinery fleet to be employed for the service provision.

Purchase of Machinery and Machinery Services

Battery quality criteria

Current Proposal

Consultation questions - purchase of Machinery

- What could be the average limits available in practice for each of the heavy metals considered in this criterion?
- Are there enough battery products in the market able to comply with the award criterion?

Consultation questions - purchase of Machinery services

- Do you agree that this criterion should be only at the comprehensive level?

Purchase of Machinery and Machinery Services

Battery quality criteria

Discussion and questions

Purchase of Machinery

Lubricant criteria

Rationale

- Lubricants are used for a variety of purposes in machinery – reduce friction and provide cooling, transmit power etc.
- Traditional mineral oil based lubricants do not biodegrade easily and can be toxic to living organisms when released to the environment (either totally or partially).
- Lubricants which use renewable (mostly vegetable) oils as base oil are biodegradable, nontoxic and environmentally friendly

Proposal

- As suitable alternatives to traditional mineral oil based lubricants are available, the criteria promotes in addition to bio-based lubricants, several alternatives to conventional mineral lubricants that present good biodegradability potential, low toxicity and are not bioaccumulative
- The new criterion is aligned with the current revision of the EU Ecolabel for Lubricants which does not propose criteria on renewability, PAG, PAOS minimum content.
- The new criterion also considers greases, gear oils, hydraulic fluids and four-stroke oils.
- Four-stroke oils are addressed through the introduction of a technical specification on low viscosity lubricants (LVL) and re-refined oils.

Purchase of Machinery

Lubricant criteria

Current Proposal

TS3. Machinery Lubricant *(This criterion is applicable only if the relevant lubricants are included at the time of purchase)*

- **Core and Comprehensive criteria:** Hydraulic fluids, gear oils, chainsaw oils, two-stroke oils and greases used in PSM machinery must not have Health or Environmental Hazard statement or R-phrase at the time of application (Lowest classification limit in Regulation (EC) No. 1272/2008 or Council Directive 99/45/EC). The cumulative mass percentage of substances present in the hydraulic fluids and greases that are both non-biodegradable and bioaccumulative must not be more than 0.1% (w/w).

Verification:

The tenderer must provide the technical sheets of the relevant lubricant to be supplied. Products that are compliant with EU Ecolabel or equivalent type 1 ecolabel fulfilling the above requirement will be deemed to comply.

For four-stroke lubricants, unless the manufacturer of the machinery recommends another type of lubricant, the lubricant of the machinery must be low viscosity engine lubricant oils (LVL) or re-refined lubricant oils, with a minimum of 25% re-refined base oils. LVL are those corresponding to SAE grade number 0W30 or 5W30 or equivalent.

The tenderer must provide a declaration of compliance with this criterion supported by the material safety data sheets for all products supplied in the execution of the contract.

Purchase of Machinery Services

Lubricant criteria

Current Proposal

CPC2. Machinery Lubricant

- **Core and Comprehensive criteria:** The contractor must ensure that the hydraulic fluids, gear oils, chainsaw oils, two-stroke oils and greases used in PSM machinery employed for the service are complaint with TS3 on machinery lubricants as defined in the section 5.1.7.

The contractor will keep records which shall be made available to the contracting authority. The contracting authority may set rules for penalties for non-compliance.

For four-stroke lubricants, unless the manufacturer of the machinery recommends another type of lubricant, the contractor must replace the lubricants used in PSM machinery employed for the service with that complaint with TS3 on machinery lubricants for four-stroke engines.

The contractor will keep records which must be made available to the contracting authority. The contracting authority may set rules for penalties for non-compliance.

Purchase of Machinery and Machinery Services

Machinery Lubricant criteria

Current Proposal

Consultation questions - purchase of Machinery Lubricants

- Do you agree with the technical specification for machinery lubricants?
- Does this result in additional difficulties in sourcing environmentally friendly, non-toxic and biodegradable lubricants?

Consultation questions - purchase of Machinery services

- Do you agree with the reformulation of the criterion?

Purchase of Machinery and Machinery Services

Lubricant criteria

Discussion and questions

Purchase of Machinery and Machinery Services

Noise emission criteria

Current Proposal - withdrawn

- Noise emissions limits are too stringent at the comprehensive level and the market share of battery electric powered machinery is still small (especially for professional equipment)
- Ongoing consultation on the evaluation and impact assessment of the Directive and a possible revision of Directive 2000/14/EC, for which the ODELIA study
- Non-availability of adequate compiled data to produce the necessary benchmarks for deriving an acceptable noise emission criterion
- Criteria is very important
- Simpler to address energy use, noise and air pollution together by revert to the best available technologies – electric battery machinery which operate with zero exhaust emissions

Purchase of Machinery and Machinery Services

Machinery materials criteria

Current Proposal - withdrawn

- Criterion might be used only when purchasing machines but not when purchasing services. Requiring detailed information on machinery materials might be complicated when buying services. Possible Limited impact as an award criteria.
- Limiting these "substances" could impact performance, durability and safety of equipment.
- Verifying compliance and enforcement of the requirements of the criterion questionable as currently available test methods for phthalates has a detection limit of 50 mg / kg
- Two Type I ecolabels have criteria specifying limits for this criterion but no conclusive information on the market availability of machinery capable of meeting this criterion
- Difficulty of verifying compliance due to the current test method detection limits

Purchase of Machinery and Machinery Services

Noise emissions criteria and Machinery materials criteria

Discussion and questions

EU GPP Criteria Set Proposal

- Purchase of Machinery for PSM
- Purchase of Vehicles for PSM
 - Purchase of Vehicles
 - Purchase of Service fleets
- Cleaning activities for PSM
- Gardening activities for PSM
- Common criteria for Service categories

VEHICLES AND SERVICE FLEETS

Scope of the categories

Vehicles

- Vehicles purchased by the contracting authority to carry out PSM services by themselves
- Heavy duty vehicles, meaning vehicles of category N2 and N3, as defined by Directive 2007/46,
 - Special vehicles and other special purposes vehicles as defined by Directive 2007/46:
 - Street Cleaning vehicles (sweepers)
 - Vehicles for winter maintenance (spreaders)

(Purchase of LDVs and L-category vehicles are covered by the EU GPP Transport)

Fleets used by to provide PSM services outsourced by the contracting authority. They can be composed by:

- Light duty vehicles, meaning vehicles of category N1 and M1 as defined by Directive 2007/46.
- L-category vehicles as defined by Regulation 168/2013.
- Heavy duty vehicles, meaning vehicles of category N2 and N3, as defined by Directive 2007/46,
- Special vehicles and other special purposes vehicles as defined by Directive 2007/46:
 - Street Cleaning vehicles (sweepers)
 - Vehicles for winter maintenance (spreaders)

Service fleets

VEHICLES AND SERVICE FLEETS

Vehicles

Service fleets

Vehicles	Service fleets
Technological options to reduce GHG Emissions	
	Cyclelogistics
Tyre pressure monitor Systems (TPMS)	
Low viscosity lubricant oils	Low viscosity lubricant oils
Vehicle tyres- rolling resistance	
Air conditioning gases	
Improved air pollutant emissions performance (HDV)	Air pollutant emissions (fleet composition)
Zero tailpipe emission capability	
Efficiency of PM collection of sweepers	
Water recirculation systems of sweepers	
Distribution performance of spreaders	
Tyre noises	
Vehicle noise	
Sweepers noise	

Vehicles and service fleets

GHG emissions criteria

Rationale for vehicles

- Special purpose vehicles → not yet a EU-harmonised method to measure CO2 emissions performance
- Heavy duty vehicles → VECTO already approved but data will not be available until 2019-2020
- **Specific technologies options** exist that can reduce GHG emissions compared to the conventional ICEs:
 - Hybridisation
 - Improved aerodynamics
 - Specific for special purpose vehicles: load-sensing hydraulic system
 - Alternative fuels: electricity, hydrogen and dual-fuel natural gas (50% gas energy ratio), high pressure direct injection natural gas and dedicate natural gas vehicles with 15% biomethane → comprehensive, in line with CVD revision and EU GPP transport

Rationale for service fleets

- Average lifetime of vehicles up to 12 years → fleet composition to select tenderers that have invested to renovate their fleets
- Yearly **tiers from 2019 to 2021** to reflect the **market evolution** and the action of **natural fleet replacement**
- **Cyclelogistics** → several municipalities that use cargo bikes for street cleaning → technical specification, requiring that the fleet contains cycles and cycle trailers

Vehicles and service fleets

GHG emissions criteria

Rationale for other technology options

- Tyre pressure monitoring systems (TPMS) → no mandatory for vans and HDVs and cost-effective → core and comprehensive.
- Vehicle tyres rolling resistance → cost-effective option covered by Energy Efficiency Directive → core and comprehensive.
- *Special purpose vehicles are excluded → at low speed no significant benefits*
- Retreaded tyres → use of retreaded tyres instead of new tyres brings environmental benefits.
- Air conditioning gases → HDVs not in MAC directive, GPP as driver to promote the use of low GWP and non-HFC, all to be phased out by F-gas Reg.
- Fleets → tyres and lubricants are replaced along the vehicle lifetime → CPC for maintenance activities
- Low viscosity lubricants → the type of lubricant of the vehicle is seldom included in the technical sheets, and sometimes it is not a technical feature offered to the consumers → withdrawn from vehicles and retained in service fleets

Vehicles and service fleets

GHG emissions criteria

Vehicles

TS1. Technological options to reduce GHG emissions *(Note: this criterion is applicable to heavy duty vehicles and special purpose vehicles)*

The vehicle must be equipped by one of the following technologies demonstrating WTW GHG emissions reduction

- Improvement in aerodynamics: active flow control (only for trucks used in regional duty cycles) (ONLY CORE)
- Improvement in aerodynamics: Boat tails / extension panels (only for trucks used in regional duty cycles) (ONLY CORE)
- Hybrid vehicles, both diesel and natural gas (ONLY CORE)
- Full Electric vehicles
- Hydrogen fuel Cell Electric vehicles.
- OEM dual-fuel natural gas vehicle with a gas energy ratio over the hot part of the WHTC test-cycle of at least 50%.
- High pressure direct injection natural gas vehicles
- Plug-in hybrid: Vehicle equipped with a battery pack which can be charged from the grid and provides the energy for the electrical drive of the body and equipment
- Load-sensing-hydraulic system (for sweepers and spreaders): the flow-capacity of the pump will be regulated through the load-sensing-pressure.
- Dedicated natural gas vehicles under the conditions set in the note below.

*Note: The contracting authority may include dedicated natural gas vehicles if they have a supply of renewable methane meeting at least **15%** of their demand.*

Verification:

The tenderer must present the technical sheet of the vehicle where these technical or fuel technology specifications are stated.

Vehicles and service fleets

GHG emissions criteria

Service fleets

TS1. GHG emissions (These criteria apply only if the operators owns or leases the service fleet)

- For **HDV**, the fleet must be composed by following shares of vehicles equipped with one of the eligible technologies set by the TS1:

Core level - HDV

- 2019: 20%
- 2020: 28%
- 2021: 36%
- 2022: 44%

Comprehensive level - HDV

- 2019: 32%
- 2020: 40%
- 2021: 48%
- 2022: 56%

- For **L-category** vehicles the fleet must be composed by following shares of electric vehicles:

Core level – L category

- 2019: 25%
- 2020: 35%
- 2021: 45%
- 2022: 55%

Comprehensive level – L category

- 2019: 40%
- 2020: 50%
- 2021: 60%
- 2022: 70%

- For LCVs **12% (core) / 25% (compr.)** of the fleet to be used under the contract shall comply with the core TS1 CO2 emissions for the category 'Purchase, lease or rental of LCVs' of the EU GPP criteria for transport
- Only compr.:** For LCVs **12%** of the fleet to be used under the contract shall comply with the comprehensive TS1 CO2 emissions for the category 'Purchase, lease or rental of LCVs' of the EU GPP criteria for transport

Verification: same as the TS1 of vehicles together with the list and technical sheets or certificates of conformity of the whole fleet.

Vehicles and service fleets

GHG emissions criteria

Service fleets

TS5. Fuels

Core and Comprehensive

Note: this criterion is applicable only if the contracting authority qualifies dedicated natural gas vehicles as eligible technology and the tenderer offers dedicated natural gas vehicles to comply with TS1 of vehicles

At least **15%** of the methane supply shall be renewable methane.

Verification

The tenderer shall provide the contract(s) with supplier(s) and the description and technical specifications of the production and the dedicated fuel supply system.

Vehicles and service fleets

GHG emissions criteria

Service fleets

TS2. Cyclelogistics

Core and Comprehensive

(in cities where the urban infrastructure is suitable).

The tenderer must offer a **service fleet that includes the use of cycles and cycle trailers**, which may be electrically power assisted cycles, to **minimise the use of motorised vehicles**, according to the measures to minimise the environmental issues set by the TS1 Environmental management practices within the common criteria for service categories (see section 7.2)

Verification: The tenderer will present the specifications of the service fleet and the description of the way that cycles and cycle trailers will be used to minimise the use of motorised vehicles.

Vehicles and service fleets

GHG emissions criteria

Vehicles

TS2. Tyre Pressure Monitoring Systems (TPMS)

Core and Comprehensive

Note: this criterion is not applicable to special-purpose vehicles

LCVs and heavy-duty vehicles must be equipped with tyre pressure monitoring systems (TPMS) or with sensors that enable the monitoring at the operator site.

Verification

The tenderer shall provide the technical sheet of the vehicle where this information is stated.

TS4. Tyre Pressure Monitoring Systems (TPMS)

Core and Comprehensive

Note: this criterion is not applicable to special purpose vehicles

All the LCVs and heavy duty vehicles must be equipped with systems compliant with TS2 on TPMS as defined in the section 6.1

Verification

Same as TS2 on vehicle tyres, together with the list and technical sheets of the whole fleet.

Service fleets

Vehicles and service fleets

GHG emissions criteria

Vehicles

TS4. Vehicle tyres – rolling resistance

Core and Comprehensive

Note: this criterion is not applicable to special purpose vehicles

The vehicles shall be equipped with

- Tyres that comply with the highest fuel energy efficiency class for rolling resistance expressed in kg/tonne, as defined by Regulation (EC) No 1222/2009 of the European Parliament and of the Council of 25 November 2009 on the labelling of tyres with respect to fuel efficiency and other essential parameters. This requirement shall not prevent the public authority from purchasing tyres with the highest wet grip class where justified by safety

OR

- Retreaded tyres

Verification

The tenderer shall provide the label of the tyre according to Regulation (EC) No 1222/2009 for tyres under case a, or the Notice of approval according to Annex 1 of UNECE Regulation 109 for retreaded tyres (case b)

AC2. Vehicle tyres – retreaded tyres

Comprehensive

Points will be awarded to **special purpose** vehicles equipped with retreaded tyres

Verification

The tenderer must provide the Notice of approval according to Annex 1 of UNECE Regulation 109 for retreaded tyres

Vehicles and service fleets

GHG emissions criteria

Service fleets

TS3. Vehicle tyres – rolling resistance

Core and Comprehensive

Note: this criterion is not applicable to special purpose vehicles

All the vehicles shall be equipped with tyres compliant with TS2

Verification

Same as TS2 on vehicle tyres, together with the list and technical sheets of the whole fleet.

CPC2. Vehicle tyres – rolling resistance

Core and Comprehensive (*Same for core and comprehensive*)

The contractor shall replace the worn tyres of vehicles providing the service with

- a) new tyres that comply with the highest fuel energy efficiency class for rolling resistance expressed in kg/tonne, as defined by Regulation (EC) No 1222/2009 of the European Parliament and of the Council of 25 November 2009 on the labelling of tyres with respect to fuel efficiency and other essential parameters. This contract performance clause shall not prevent the use of tyres with the highest wet grip class where justified by safety.

OR

- b) retreaded tyres

The contractor will keep records which shall be made available to the contracting authority. The contracting authority may set rules for penalties for non-compliance

Vehicles and service fleets

GHG emissions criteria

Vehicles

AC1. Air conditioning gases

Comprehensive

Points will be awarded to those HDVs equipped with an air conditioning system that use a refrigerant with a global warming potential (GWP), related to CO₂ and a time horizon of 100 years, < 150.

Verification

The tenderer shall provide the name, formula and GWP of the refrigerating gas used in the air conditioning system. If a mixture of gases is used (n number of gases), the GWP will be calculated as follows:

$$\text{GWP} = \sum (\text{Substance } X1 \% \times \text{GWP}(X1)) + (\text{Substance } X2 \% \times \text{GWP}(X2)) + \dots$$

(Substance Xn % x GWP(Xn)) where % is the contribution by weight with a weight tolerance of +/- 1%

Vehicles and service fleets

GHG emissions criteria

Service fleets

CPC1. Low viscosity lubricant oils

Comprehensive

Unless the manufacturer of the vehicle recommends other type of lubricant, the contractor shall **replace the lubricants** of the vehicles providing the service **with low viscosity engine lubricant oils** (LVL). LVL are those corresponding to SAE grade number 0W30 or 5W30 or equivalent.

The contractor will keep records which shall be made available to the contracting authority. The contracting authority may set rules for penalties for non-compliance.

Vehicles

~~TS3. Low viscosity lubricant oils~~

~~Comprehensive~~

~~Unless the manufacturer recommends other type of lubricant, the vehicles shall use low viscosity engine lubricant oils (LVL). LVL are those corresponding to SAE grade number 0W30 or 5W30 or equivalent.~~

~~Verification~~

~~The tenderer shall provide the technical sheet of the vehicle where the proposed lubricants are recommended.~~

Vehicles and service fleets

GHG emissions criteria

Discussion and questions

Vehicles and service fleets

Air pollutant emissions

Rationale for vehicles

- **Euro VI** was effective in **cutting overall NOx emissions by over 98%** when compared to Euro V vehicles.
- **Euro VI natural gas** vehicles increase that reduction in NOx emissions to 99%.
- **Electric and hydrogen vehicles** can reduce the emissions further, to zero tailpipe air pollutants emissions
- Lifetime of heavy duty vehicles = average of 12 years → there is a market for used trucks that shall be taken into account → TS requesting the **compliance with Euro VI**
- Award criteria to **directly promote the technologies**
 - **Test results of Euro VI** are only valid **to evaluate compliance** and not to compare different vehicles

Vehicles and service fleets

Air pollutant emissions

Rationale for service fleets

- Current fleet composition of vehicles → **low share of Euro VI/6.**
- Need to stimulate the **acceleration of the replacement rate** to increase the share of Euro VI/6
- **Minimum percentage** of 40% of EURO VI/6 was proposed for core and 60% for comprehensive level for the year 2018
- Percentages need to rise yearly to maintain the same ambition level → the criteria proposal includes yearly increments of **10% for LDVs and L-category** vehicles and **8% for trucks.**
- **Comprehensive level covers more aspects:**
 - **Zero tailpipe emission LDVs** in urban areas with poor air quality.
 - Euro 6d-TEMP and Euro 6-d standard to incentivise the penetration of the Euro 6d stage
- **Award criterion at both levels** in line with vehicles to promote best technologies → natural gas, electric and semi-electric and hydrogen.

Vehicles and service fleets

Air pollutant emissions

Vehicles

TS3. Air pollutant emissions performance

- **Core and Comprehensive criteria: N3 vehicles and N2 vehicles** with a reference mass exceeding 2 610 kg must meet **Euro VI**. N2 vehicles with a reference mass not exceeding 2 610 kg must comply with the TS2 Air pollutant emission performance of the EU GPP of Transport criteria for cars and LCVs (Category 1).
Special purpose vehicles must meet **Euro VI or Euro 6**, depending on the reference mass of the vehicle they are mounted.

Verification: The tenderer must present the certificate of conformity of the vehicle. For those vehicles having achieved above-mentioned standard following a technical upgrade the measures must be documented and included in the tender, and this must be verified by an independent third party.

Vehicles and service fleets

Air pollutant emissions

Service fleets

TS6. Air pollutant emissions *(These criteria apply only if the operators owns or leases the service fleet)*

All HDV and LDV of the service fleet must meet at least Euro V/5*, while all L-category must meet Euro 3.

HDV Euro VI composition			
	Core	Comprehensive	
2019	48%	68%	
2020	56%	76%	
2021	64%	84%	
2022	72%	92%	
LDV Euro 6 composition			
	Core	Comprehensive	LDV Euro 6d or 6d-TEMP Comprehensive
2019	50%	60%	15%
2020	60%	70%	20%
2021	70%	80%	25%
2022	80%	90%	35%
L-cat vehicles Euro 4 composition			
	Core	Comprehensive	
2019	50%	60%	
2020	60%	70%	
2021	70%	80%	
2022	80%	90%	

Vehicles and service fleets

Air pollutant emissions

Vehicles

AC3. Improved air pollutant emissions performance

- **Core and Comprehensive Criteria:** N3 vehicles and N2 vehicles with a reference mass exceeding 2 610 kg and special purpose vehicles. Points will be awarded to the following technologies: **natural gas; plug in hybrid electric vehicles (PHEV); battery electric vehicles (BEV) and hydrogen fuel cell electric vehicles (FCEV).**

(to be detailed to which extent more points will be attributed to zero tailpipe capable vehicles, i.e. plug in hybrid electric vehicles (PHEV), battery electric vehicles (BEV), and fuel cell electric vehicles (FCEV).)

Verification: The tenderer must present the certificate of conformity of the vehicle.

Service fleets

AC2. Air pollutant emissions

(These criteria is not applicable if zero tailpipe emissions required for all vehicles in the technical specification TS6.2)

- **Core and Comprehensive criteria:** Points will be awarded to those tenders offering a
 - (a). higher percentage than the one set by the TS6 (see above), OR
 - (b). LDVs and L-category vehicles that have an emission performance better than Euro 6/4 OR
 - (c). Natural gas HDVs and zero-emission capable vehicles, meaning with a minimum range of 40 km without emitting any tailpipe emissions for cars and LCVs, and plug in hybrid electric vehicles (PHEV), battery electric vehicles (BEV), and fuel cell electric vehicles (FCEV) for buses

For the fleet to be used under the contract, in proportion to the excess over the TS6 (see above) *(to be detailed to which extent points will be attributed to higher percentages, better performance and zero tailpipe vehicles).*

Vehicles and service fleets

Air pollutant emissions

Service fleets

TS6.2. Air pollutant emissions (Comprehensive)

In case of urban areas with air quality issues

LDVs and L-category vehicles must have zero tailpipe emissions.

If there is no charging infrastructure available, or the expected use profile requires large ranges:

The vehicles may at the least be **zero tailpipe emissions capable**, meaning a LDV that can run the minimum range of 40 km without emitting any tailpipe emissions.

Verification: The tenderer must provide the technical sheets of the vehicles where emission standards are defined. For those vehicles having achieved above-mentioned standard following a technical upgrade the measures must be documented and included in the tender, and this must be verified by an independent third party.

Vehicles and service fleets

Air pollutant emissions

Discussion and questions

Vehicles and service fleets

Water consumption (for sweepers that use water for dust suppression)

Rationale

- Some **sweepers** use **water for dust suppression**, which might entail significant **water consumption**.
- Sweepers equipped with **water recirculation** systems have an estimated **saving potential of 30%** approximately
- It is proposed that a **technical specification** requiring a water recirculation system is set **at comprehensive level**, while an **award criterion** would promote these systems **at core level**.

Vehicles and service fleets

Water consumption (for sweepers that use water for dust suppression)

Vehicles

CORE

AC4. Water recirculation systems *(If the contracting authority is requiring sweepers that use water for dust suppression)*

Points will be awarded to sweepers that are equipped with a **water recirculation system** meaning a system that recirculate part of the water that is used for dust suppression. The water is spread and then removed together with the dust by the sweeper. The machine filters the wastewater and it is recirculated to the water tank.

COMPREHENSIVE

TS5. Water recirculation systems *(If the contracting authority is requiring sweepers that use water for dust suppression)*

Sweepers must be equipped with a water recirculation system meaning a system that recirculate part of the water that is used for dust suppression. The water is sprayed and then removed together with the dust by the sweeper. The machine filters the wastewater and it is recirculated to the water tank.

Verification: The tenderer must present the technical sheet where the water recirculation system is described.

AC4. Water recirculation systems *(If the contracting authority is requiring sweepers that use water for dust suppression)*

- **Core and Comprehensive criteria:** Points will be awarded to those tenders offering a service fleet proportionally to the share of vehicles equipped with a water recirculation system.

Verification: The tenderer must present the list of the vehicles of the service fleet and their technical sheets

Service fleets



Vehicles and service fleets

Distribution performance of spreaders

Rationale

- The spreader has to operate guarantying that a **homogeneous distribution of spreading material** is achieved within the set spreading dosage, width and spreading pattern → contributing to **reduce the use of the de-icing agent**
- The manufacturers associated in EUnited Municipal Equipment and the Engineering Center Bygholm in Denmark have developed a **test for spreading quality** → test method is now being **adopted by a CEN technical committee** and been approved soon
- The criterion reflects the requirements of this test.

Vehicles and service fleets

Distribution performance of spreaders

Vehicles

TS6. Distribution performance

- **Core and Comprehensive criteria:** The spreader model must comply with the requirements on distribution performance set by EN 15597-2, which comprises the following parameters:
 - dosage
 - spreader start
 - lateral distribution

Verification: The tenderer must present the test report according to the standard EN 15597-2, showing that the test results on:

- Dosage test
- Spreader start
- Dynamic test lateral distribution

are that the "spreader is qualified"

The test must be carried out by an independent laboratory

Service fleets

AC3. Distribution performance of spreaders

- **Core and Comprehensive criteria:** Points will be awarded to those tenders offering a service fleet proportionally to the share of spreaders that are qualified according to the EN 15597-2.

Verification: The tenderer must present the list of the vehicles of the service fleet and their test reports according to EN 15597-2 issued by an independent laboratory.

Purchase of Vehicles and Service fleets

Criteria withdrawn: Efficiency of particulate matter collection (sweepers)

Rationale

- Manufacturers use **EN 15429-3:2015** to test the performance of their sweepers → standard is currently **under revision** to include measurements on PM2.5.
- Results are **not comparable** between them because they **depend on the features of each sweeper**, such as size and load. Setting benchmarks would require the test results of many different samples of sweepers, which are not available.
- **For the same size and load**, the results of the tests are **not comparable** and that it is not possible to determine **which difference would be significant** to allocate the points.
- **Lack of laboratories** hinders the verification of the criterion.
- Criterion is proposed to be withdrawn, also for the service fleets.

Vehicles and service fleets

Water recirculation systems and Distribution performance of spreaders

Discussion and questions

Purchase of Vehicles and Service fleets

Noise emissions

Rationale

- Noise emissions → environmental issue addressed only at comprehensive level.
- Vehicle tyres/noise emissions → 3 dB below the limit values according to Regulation 611/2009 → the tyres fall within the best performing class of labelling Regulation (EC) No 1222/2009.
- Similar to low RR, low noise tyres are not efficient at low speed → special purpose vehicles are excluded
- Vehicle noise → Phase 3 of Regulation (EU) No 540/2014 applicable for new vehicle type from 1 July 2024 and for first registration from 1 July 2026 → award criterion for early compliance
- Sweepers → noise marking only, according to the article 13 of the Directive 2000/14/EC → under revision
 - No limit values are proposed for sweepers in this criterion proposal, only an award criterion that would give points proportionally to the noise levels

Vehicles and service fleets

Noise emissions

Vehicles

COMPREHENSIVE

TS7. Tyre noise *(not to be used if, for safety reasons, tyres with the highest wet grip class, snow tyres or ice tyres are needed) Note: this criterion does not apply to special purpose vehicles.*

The HDVs must be equipped with

- **a)** tyres with external rolling noise emission levels 3dB below the maximum established in Regulation (EC) No 661/2009 Annex II Part C. This is equivalent to the top category (of the three available) of the EU tyre label external rolling noise class. Or
- **b)** retreaded tyres

Verification: The tenderer must provide the label of the tyre according to Regulation (EC) No 1222/2009 for tyres under case a) or the Notice of approval according to Annex 1 of UNECE Regulation 109 for retreaded tyres (case b)

COMPREHENSIVE

CPC3. Tyre noise *(Note: This CPC does not apply to retreaded tyres.)*

The contractor must replace the worn tyres of vehicles providing the service with new tyres with external rolling noise emission levels 3dB below the maximum established in Regulation (EC) No 661/2009 Annex II Part C. This is equivalent to the top category (of the three available) of the EU tyre label external rolling noise class. The external rolling noise emissions will be tested according to the Annex I of Regulation (EC) No 1222/2009. The contractor will keep records which must be made available to the contracting authority. The contracting authority may set rules for penalties for non-compliance

Service fleets

Purchase of Vehicles and Service fleets

Noise emissions

COMPREHENSIVE

AC5. Vehicle noise

Note: this criterion does not apply to special purpose vehicles

Points will be awarded to the vehicles with noise emissions compliant with the Phase 3 limits of Regulation (EU) No 540/2014. The noise emissions will be tested according to the Annex II of Regulation (EU) No 540/2014.

Verification: The tenderer must provide the Certificate of Conformity of the vehicle.

Vehicles

COMPREHENSIVE

AC5. Noise emissions

Points will be awarded to those tenders offering a service fleet totally composed by vehicles compliant with the AC5 on vehicle noise emissions set in the section 6.1.5.

Verification: The tenderer must present the list of the vehicles of the service fleet and their certificates of conformity.

Service fleets

Purchase of Vehicles

Noise emissions

Vehicles

AC6. Sweepers

- **Comprehensive criteria:** Points will be awarded to the sweepers with lower guaranteed sound power level, according to the Directive 2000/14/EC

Verification: The tenderer must provide a copy of the CE marking together with the indication of the guaranteed sound power level according to the to the Directive 2000/14/EC of the sweeper.

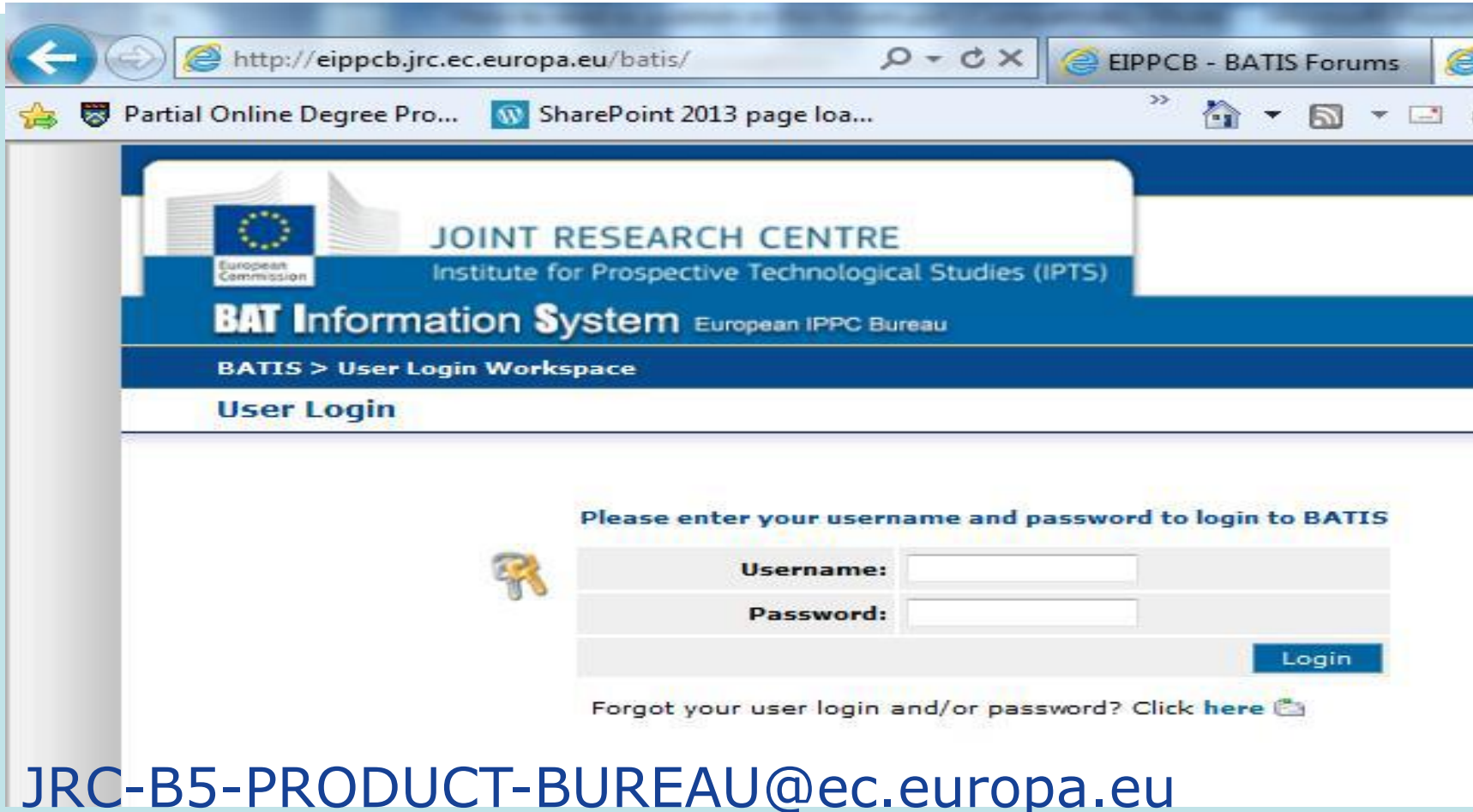
Purchase of Vehicles and Service fleets

Noise emissions

Discussion and questions

Comments using the BATIS system

Written comments on the second criteria proposals are invited and should be posted on the BATIS system **at the latest by Monday 16th July 2018**



The screenshot shows a web browser window with the URL <http://eippcb.jrc.ec.europa.eu/batis/>. The page header includes the European Commission logo and the text "JOINT RESEARCH CENTRE Institute for Prospective Technological Studies (IPTS) BAT Information System European IPPC Bureau". Below the header, the navigation path is "BATIS > User Login Workspace" and the page title is "User Login". The main content area contains a login form with the instruction "Please enter your username and password to login to BATIS". The form has two input fields: "Username:" and "Password:". A "Login" button is located to the right of the password field. Below the form, there is a link: "Forgot your user login and/or password? Click [here](#)".

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Any questions?

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EU GPP criteria for "Public Space Maintenance"

Technical report and criteria proposal (2nd draft)

Interactive webinar - 20 June 2018
2nd Ad Hoc Working Group Meeting

The European Commission's
science and knowledge service
Joint Research Centre



European
Commission

Agenda

Outdoor Cleaning Activities, Gardening Activities, Common Services

- | | | |
|----|---|---------------|
| 1) | Opening and welcome
Tour-de-table checking audio connections | 10.00 - 10.10 |
| 2) | Criteria set proposal for Outdoor Cleaning Activities - presentation and discussion | 10:10 -10:50 |
| 3) | Criteria set proposal for Gardening - presentation and discussion | 10:50 - 11.30 |
| 4) | Common criteria for Services Categories - presentation and discussion | 11:30 - 11:55 |
| 5) | Summary and next steps - Wrap up of the webinar | 11:55 - 12:00 |

EU GPP criteria development

Public Space Maintenance



- The Public Space Maintenance EU GPP Criteria is new!
- It incorporates and extends the scope of the current EU GPP criteria for gardening products and services to cover machinery and machinery services, outdoor cleaning products & services as well as vehicles and service fleet

Project Aim and Objective

- To **deliver EU GPP criteria** reflecting the latest technological developments in the PSM sector with consideration for stakeholder opinions, current legal developments and other GPP initiatives

Work Plan and Timeline



http://susproc.jrc.ec.europa.eu/Public_space_maintenance/documents.html

Scope and Definitions for PSM

- Public spaces for this EU GPP criteria are “..urban areas, pedestrian and vehicular areas, man made green areas, public buildings, natural areas, beaches, lakes, public furniture, etc”
- Public Space Maintenance covers routine maintenance activities and equipment, either of preventive or corrective character, done in either green or built public spaces
- The four groups of products and services included in PSM:
 - Cleaning products and cleaning services
 - Gardening products and gardening services
 - Machinery products and services
 - Vehicles and service fleet

EU GPP Criteria Set Proposal

Type of Criterion & Nomenclature

- Technical specification TS_
- Award criteria AC_
- Contract Performance Clauses CPC_
- Selection criteria SC_

EU GPP Criteria Set Proposal

- Purchase of Machinery for PSM
- Purchase of Vehicles for PSM
- **Cleaning activities for PSM**
 - Purchase of Cleaning products
 - Purchase of Cleaning services
- Gardening activities for PSM
- Common criteria for Service categories

Scope definition for Cleaning activities

Second draft Proposal

Cleaning Products

- All-purpose cleaners or industrial cleaning products for outdoor services
- Substances for snow and ice removal
- Binding agents for dust control
- Cleaning supplies and accessories (brushes, rolls, soft rags and microfiber cloths, brooms, etc).

Cleaning services

- Mechanical & manual sweeping of sidewalk, bike lane, road (asphalt, roadbed) and roadside (shoulders, curbs, green areas)
- Litter removal from the ground
- Bins' litter collection and sorting
- Mechanical & manual water jet cleaning, pressurised water cleaning apparatus and, high-pressure cleaning apparatus
- Façade/surface cleaning
- Graffiti removal
- Snow and ice removal from sidewalks, bike lanes and roads
- Cleaning of fountains, lakes and ponds
- Clean-up after natural weather events

PSM Cleaning activities

Main Environmental Impacts

Cleaning products

- **Cleaning agents**
 - ✓ Water depletion from products dilution and cleaning operations
 - ✓ Wastewater production
 - ✓ Release of toxic substances and waste from the manufacturing process
- **De-icing products**
 - ✓ Impacts on water and soil ecosystems from the use of road salt
 - ✓ Corrosion of metals parts of structures and vehicles associated with the use of road salt
 - ✓ Water and energy depletion, and emissions associated with Calcium Magnesium Acetate (CMA) mining and manufacture

Cleaning services

- **Street sweeping**
 - ✓ Dust emissions (micro-particulate matter - PM10) during sweeping activities
 - ✓ Sludge production associated with street cleaning
- **Winter maintenance**
 - ✓ Emissions associated with transportation and distribution of de-icing materials
 - ✓ Dust production associated with the use of traction sand
 - ✓ Risk of materials run-off in storage infrastructures
- **Weed control**
 - ✓ Impacts of run-off to surface water associated with the use of herbicides (aquatic eco-toxicity)

Purchase of Cleaning products

Second Draft proposal

Hot spots

Use phase of cleaning agents

Use phase of de-icing products

Use of consumable good

Criteria

- Cleaning products with low environmental impacts
- **Graffiti removal products**
- De-icing and snow removal products
- Compostable bin bags

Purchase of Cleaning products

Cleaning products with low environmental impacts

Rationale

- Environmental impacts from the use of cleaning products → **Water depletion, eutrophication and ecotoxicity**, from **product dilution and cleaning operations**.
- **Good operational practices** → less use of products and decreased production of waste can mitigate the resulting environmental impact.
- Using **cleaning products which are biodegradable, do not bioaccumulate and do not contain toxic substances** could address this issue.
- The technical specification has been formulated based on volume as a standard measure for cleaning products.
- An award criterion has been added to complement the technical specification.

Purchase of Cleaning Products

Cleaning products with low environmental impacts

Criteria proposal

TS1. Use of cleaning products with low environmental impacts

<u>Core</u>	<u>Comprehensive</u>
<p>1) At least 30%* of all cleaning products per year, by volume at purchase, must be compliant with criterion 1 on toxicity to aquatic organisms and criterion 4 on excluded and restricted substances of the EU Ecolabel for hard surface cleaning products.</p> <p>2) All products that have not been awarded with an ISO Type I ecolabel must not be classified and labelled as being acutely toxic, a specific target organ toxicant, a respiratory or skin sensitiser, carcinogenic, mutagenic or toxic for reproduction, or hazardous to the environment, in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (the 'CLP Regulation').</p> <p>3) Cleaning products must be provided with the recommended dosing systems (e.g. pump, graduated cylinder) when applicable. Information on the technical data sheet of the dosing system must specify the dose, and dispensing device.</p>	<p>1) At least 50%* of all cleaning products per year, by volume at purchase, must be compliant with criterion 1 on toxicity to aquatic organisms and criterion 4 on excluded and restricted substances of the EU Ecolabel for hard surface cleaning products.</p> <p>2) All products that have not been awarded with an ISO Type I ecolabel must not be classified and labelled as being acutely toxic, a specific target organ toxicant, a respiratory or skin sensitiser, carcinogenic, mutagenic or toxic for reproduction, or hazardous to the environment, in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (the 'CLP Regulation').</p> <p>3) Cleaning products must be provided with the recommended dosing systems (e.g. pump, graduated cylinder) when applicable. Information on the technical data sheet of the dosing system must specify the dose, and dispensing device.</p>

Purchase of Cleaning products

Cleaning products with low environmental impacts

Criteria proposal

Verification:

- 1) The tenderer must supply a list of the cleaning products that will be supplied within the contract and provide documentation proving their compliance with the requirements. Where ISO type I ecolabel products are supplied, the applicant must provide a copy of the type I label certificate and/or packaging label.
- 2) The tenderer must provide a declaration of compliance with this criterion supported by the material safety data sheets for all products that have not been awarded with the EU Ecolabel for Hard Surface Cleaning Products or with another ISO Type I ecolabel.

Explanatory Notes

* Recommended values for a minimum volume of Ecolabel products purchased

AC1. Use of additional cleaning products with low environmental impacts

Similar for Core and Comprehensive

- Points will be awarded in proportion to each 10% improvement upon the minimum technical specification required in TS1.

Verification: The same as TS1.

Purchase of Cleaning products

Cleaning products with low environmental impacts

Consultation questions

- Do you agree with the recommended values for a minimum volume of Ecolabel products purchased $X=30\%$ (core level), $Y=50\%$ (comprehensive level)?
- Would do you consider the current technical specification and award criterion achievable based on your expert knowledge on the availability of ecolabelled cleaning products?

Purchase of Cleaning products

Graffiti removal products

Rationale

- The use of graffiti removal products may cause serious environmental problems (e.g. eutrophication and ecotoxicity) due to the release of chemicals to the atmosphere and the inappropriate discharge of untreated waste water resulting from the operation.
- Environmentally friendly graffiti removal products which are biodegradable, do not bioaccumulate and do not contain toxic substances are suggested.
- Wide variety of substrates and different types of graffiti removal products → proposed criteria covers all graffiti products for all types of surfaces

Purchase of Cleaning products

Graffiti removal products

Criteria proposal

TS2. Graffiti removal products

Core and Comprehensive Criteria (*same formulation*):

Chemical graffiti removal products must not be classified and labelled as being acutely toxic, a specific target organ toxicant, a respiratory or skin sensitiser, carcinogenic, mutagenic or toxic for reproduction, or hazardous to the environment, in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (the 'CLP Regulation').

Verification:

The tenderer must provide a declaration of compliance with this criterion supported by the material safety data sheets for all products that have not been awarded with an ISO Type I ecolabel. Products that have been awarded with an ISO Type I ecolabel that covers this specific requirement are deemed to comply.

Purchase of Cleaning products

De-icing and snow removal products

Rationale

- Reported negative environmental effects of de-icing from the use of salts such as NaCl , CaCl_2 and MgCl_2
- Alternative de-icing products which are not acutely toxic and have minimal environmental impacts than conventional salts are in the market, including carbohydrate-based solutions, calcium magnesium acetate (CMA), and potassium acetate.

Purchase of Cleaning products

De-icing and snow removal products

Criteria proposal

TS3. De-icing and snow removal products (*same formulation*):

Core and Comprehensive Criteria:

De-icing and snow removal products must not be classified and labelled as being acutely toxic, a specific target organ toxicant, a respiratory or skin sensitiser, carcinogenic, mutagenic or toxic for reproduction, or hazardous to the environment, in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures ('CLP Regulation').

Verification:

The tenderer must provide data (material safety data sheet and amount) of the products to be supplied in the execution of the contract.

Consultation question

Are you in agreement with the formulation of this criterion?

Purchase of Cleaning products

Consumable goods

Criteria proposal

AC2. Compostable bin bags *(Note: This criterion applies if biowaste is collected separately and processed by industrial composting plants that accept compostable bags.)*

- **Comprehensive Criteria:**

Points will be awarded to bin bags used to collect biowaste that are compostable according to standards EN 14995:2007, [EN 13432:2000](#), or equivalent.

Verification:

Tenderers must present proof of third party certification in accordance with EN 14995:2007, ~~for the bin bags used to collect biowaste. Bin bags that have been awarded with an appropriate ISO Type I ecolabel will be deemed to comply~~ [EN 13432:2000](#), or equivalent.

Purchase of Cleaning Products

Discussion and questions

Overview Purchase of Cleaning services

Second Draft proposal

Hot spots

Operational management

Criteria

- Use of products
- De-icing and snow removal operations
- Reduction of PM10 street dust
- **Cleaning services plan**
- **Graffiti removal**
- Weed control

Purchase of Cleaning services

Operational procedures and best practices

Rationale

- Good operational procedures and best practices can reduce amount of cleaning products → significantly minimize the environmental impacts resulting from the provision of cleaning services.
- A set of criteria that gathers the best practices in order to reduce the environmental impact of the provision of cleaning services is presented

Purchase of Cleaning services

Operational procedures and best practices

Criteria proposal

TS4. Cleaning, de-icing and snow removal products used for the provision of cleaning services

<u>Core</u>	<u>Comprehensive</u>
<ul style="list-style-type: none">- The cleaning products used for the provision of the cleaning services must be compliant with the requirements of the relevant technical specifications (TS1) at Core level.- The de-icing and snow removal products used for the provision of the cleaning services must be compliant with the requirements of the relevant technical specifications (TS2) at Core level.	<ul style="list-style-type: none">- The cleaning products used for the provision of the cleaning services must be compliant with the requirements of the relevant technical specifications (TS1) at Comprehensive level.- The de-icing and snow removal products used for the provision of the cleaning services must be compliant with the requirements of the relevant technical specifications (TS2) at Comprehensive level.

Verification: See the verification of the relevant technical specifications.

Purchase of Cleaning services

Operational procedures and best practices

Criteria proposal

TS5. De-icing and snow removal operations

Core and Comprehensive (*same formulation*)

The tenderers must have written procedures on de-icing and snow removal operations which must be implemented by a combination of any of the following techniques:

- *Mechanical removal of snow;*
- *Anti-icing;*
- *Prewetting*

Verification: Tenderers must provide written procedures and a de-icing and snow removal plan (in accordance with the applicable elements of the common criteria for service categories TS1. Environmental Management Measures) including equipment and products to be employed in the execution of the contract.

Purchase of Cleaning services

Operational procedures and best practices

Criteria proposal

TS6. Reduction of PM10 street dust

Core and Comprehensive criteria (*same formulation*):

The tenderers must have written procedures on PM10 street dust reduction measures which must be implemented by means of the following best practices or other relevant measures:

- Traction control practices (traction sanding using wet sieved and wear resistant rock material);
- Implement dust binding practices (dust binding solutions, dispersion techniques);
- Street cleaning practices (mechanical & vacuum sweepers, street scrubbers, combinations).

Verification: Tenderers must provide written procedures and a cleaning services plan for PM10 street dust reduction operation (...) including equipment and products to be employed in the execution of the contract.

Purchase of Cleaning services

Operational procedures and best practices

Criteria proposal

CPC1. Cleaning services plan *(Note: the contracting authority needs to agree with the contractor a cleaning plan aimed at gradually reducing the amount of cleaning products to be used for the purchase of cleaning services to allow the contractor to comply with this CPC)*

Core and Comprehensive criteria (same formulation)

The cleaning plan must cover all applicable elements of the service categories (see common service criteria category in Chapter 7) including at least the following:

- 1) energy and water consumption;
- 2) use of cleaning agents;
- 3) staff training and working instructions

The contractor must track quantities of cleaning products used and provide every six months reports on the quantity of each cleaning product used, and the task for which it was used to the contracting authority for verification purposes.

Purchase of Cleaning services

Operational procedures and best practices

Criteria proposal

CPC2. Weed Control

<u>Core</u>	<u>Comprehensive</u>
<p>In addition to the requirements set up by local regulations concerning their application, chemical herbicides must not be applied:</p> <ol style="list-style-type: none">1) 4 days before or after the area is swept; and2) in the event (or high probability of occurrence) of precipitation or dew, to prevent herbicides from being washed off the plants. <p>Herbicides must be used in line with the most recent valid version of the sustainable weed control on pavements method.</p> <p>Records of herbicides, application rates and schedules must be kept and made available to the contracting authority for verification purposes. The contracting authority may set rules for penalties for non-compliance.</p>	<p>Weed control must be carried out by applying non-chemical treatment methods such as thermal, mechanical or biological treatments.</p> <p>Records of non-chemical treatment methods and application schedules must be kept and available to the contracting authority for verification purposes. The contracting authority may set rules for penalties for non-compliance.</p>

Purchase of Cleaning services

Operational procedures and best practices

Consultation questions

- Are geographical conditions determining the best environmental practices? Would TS5 on de-icing and snow removal operations be implementable regardless of geographical condition?
- Are there protocols in place to apply these snow removal/de-icer products causing the least environmental damage?
- Do you agree with the criterion excluding the use of herbicides and chemical treatment methods at the comprehensive level?

Purchase of Cleaning services

Graffiti removal

Criteria proposal

TS7. Graffiti removal products used for the provision of cleaning services

Core and Comprehensive criteria (*same formulation*): The graffiti removal products used for the provision of the cleaning services must be compliant with the requirements of the relevant technical specifications (TS2).

Verification: See the verification of the relevant technical specifications (TS2).

CPC3. Graffiti removal operation (*Note: This criterion is applicable **only** if the removal of graffiti is from surfaces other than building fronts and requires the use of a high-pressure water sprayer*)

Core and Comprehensive criteria (*same formulation*): The removal of graffiti from surfaces other than building fronts must take place using a high-pressure water sprayer (and cleaning solutions, if necessary) provided with a separation system whereby the dirty water is recovered and can be subsequently treated. For example, with a water recycling system that catches the water used, filters it and re-uses it.

The contractor must document information on the volume and means of disposal of the wastewater and waste resulting from the graffiti removal operation as proof of compliance with the requirements above. Records of graffiti removal operations, including operational conditions and products used must be kept and made available to the contracting authority for verification purposes.

Purchase of Cleaning services

Graffiti removal

Criteria proposal

Note on graffiti removal operation

Graffiti removal operation must ensure that the method employed is suited to the surface to be cleaned. For the following types of surfaces, the following graffiti removal methods (San Francisco Department of the Environment, 2014) are generally recommended:

- a. Masonry substrates - use blasting system removal*
- b. Wood substrates - paint over.*
- c. Non porous substrates - use chemical removers*
- d. Glass graffiti or etching- use chemical removers*
- e. Street signs - apply sensitive surface chemical graffiti removers (however the effectiveness depends on the graffiti*

Purchase of Cleaning Services

Discussion and questions

EU GPP Criteria Set Proposal

- Purchase of Machinery for PSM
- Purchase of Vehicles for PSM
- Cleaning activities for PSM
- Gardening activities for PSM
 - Purchase of gardening products
 - Purchase of gardening services
- Common criteria for Service categories

Scope definition for Gardening activities

Second draft Proposal

Gardening products

- Soil improvers
- Ornamental plants
- Irrigation systems
- Herbicides and pesticides
- ~~Lubricant oils~~

Gardening services

- Pruning
- Trimming
- Planting, and Plant and trees replacement
- Fertilization
- Weed control and pesticides use
- Lawn replacement
- Manual & automated irrigation

PSM Gardening Activities

Main Environmental Impacts

Gardening products

- **Ornamental plants**
 - ✓ Impacts from the use of fertilizers and pesticides, and water depletion in the plant nurseries
 - ✓ Fuel depletion due to the heating of greenhouse structures during winter
 - ✓ Waste production due to the use of PVC pots or polystyrene plateau for the packaging of plants
- **Soil improvers**
 - ✓ Climate change, eco-toxicity and mineral depletion due to the extraction of raw materials (e.g. peat based soil improvers)
 - ✓ Eutrophication of water ecosystems due to the run-off of nutrients
- **Irrigation system**
 - ✓ Water depletion
 - ✓ Energy depletion

Gardening services

- **Pest control**
 - ✓ Eutrophication and biomagnification caused by substances affecting the food chain
 - ✓ Eco-toxicity in soil and water ecosystems
 - ✓ Alteration of biodiversity
- **Invasive species**
 - ✓ Alteration of biodiversity inducing the decline of native species
 - ✓ Impacts for human and animal health
 - ✓ Damage to infrastructures
 - ✓ Agricultural losses
- **Waste generation**
 - ✓ Waste generation from the delivery chain of ornamental plants

Overview Purchase of Gardening products

Second Draft proposal

Hot spots

Purchase of ornamental plants

Purchase of soil improvers

Water depletion

Criteria

- Environmental sustainable ornamental plants
- Plants containers and packaging
- Organic constituents of soil improvers
- Hazardous substances in soil improvers
- Physical contaminants in soil improvers
- Product performance of soil improvers
- Primary pathogens in soil improvers
- Automatic irrigation

Purchase of Gardening products

Ornamental plants

Criteria proposal

TS1. Ornamental plants (Note: In order to reduce water and fertilizer consumption, purchased ornamental plants should be plant species suitable for the local growing conditions (e.g., soil acidity, average rainfall, range of temperature over the year, etc). A list of plant species defined as suitable for the local growing conditions must be provided by the local authority.

Core

At least X%^a of purchased ornamental plants must be either:

- 1) Organic: grown according to the requirements laid down in Regulation (EC) No 834/2007, the US National Organic Programme (NOP) or equivalent legal obligations set by trade partners of the EU; or
- 2) Integrated Pest Management (IPM): grown according to IPM principles as defined by the UN Food and Agricultural Organisation (FAO) IPM programme or EU Directive 2009/128/EC

Verification: The tenderer must provide information (name and amount) of ornamental plants to be supplied in the execution of the contract indicating specifically the products that comply with the requirement for IPM or organic production. Documented transaction records that allow for the verification of compliance of individual plants or batches of plants as well as traceability back to the point of certification must be accepted. This includes valid certification for organic or IPM production^b.

Comprehensive

At least Y%^a of purchased ornamental plants must be either:

- 1) Organic: grown according to the requirements laid down in Regulation (EC) No 834/2007, the US National Organic Programme (NOP) or equivalent legal obligations set by trade partners of the EU; or
- 2) Integrated Pest Management (IPM): grown according to IPM principles as defined by the UN Food and Agricultural Organisation (FAO) IPM programme or EU Directive 2009/128/EC

Verification: The tenderer must provide information (name and amount) of ornamental plants to be supplied in the execution of the contract indicating specifically the products that comply with the requirement for IPM or organic production. Documented transaction records that allow for the verification of compliance of individual plants or batches of plants as well as traceability back to the point of certification must be accepted. This includes valid certification for organic or IPM production^b.

Purchase of Gardening products

Ornamental plants

Criteria proposal

AC1. Additional ornamental plants

Core and Comprehensive criteria (*same formulation*): Points will be awarded in proportion to each 10 % improvement upon the minimum technical specification of certified IPM or organic ornamental plant.

Verification: See above TS1.

Explanatory Note: *The contracting authority will have to specify how the percentage of purchase will be calculated, either in number or value. It could also require that for specific plants all of them should be organic to facilitate verification.*

a) X% and Y% thresholds to be defined by the procurer

b) At the time of writing, the MPS-GAP certification scheme, the GLOBALGAP flowers and plants scheme have embedded within them principles of IPM as a requirement and may be considered to provide sufficient assurance for IPM production.

Consultation question

Do you agree with the current formulation of the criterion on ornamental plants?

Purchase of Gardening products

Ornamental plants

Criteria proposal

TS2. Plants containers and packaging

Comprehensive criteria: Plants must be delivered in containers (or crates or boxes in the case of small plants) that are one of the following:

- Reusable (the tenderer must have a take-back system in place)
- Biodegradable according to EN 14995:2007 or EN 13432:2000 standard
- If there are municipal composting facilities, compostable according to EN 14995:2007 or EN 13432:2000 standard

Verification:

If containers are reusable, tenderers must provide a description of the take-back system. Tenderers must also provide a copy of the signed agreement with the plant nursery, if they are not the plant nursery.

If containers are biodegradable or compostable, tenderers must provide test reports showing that the composition of the materials fulfills the requirements according to EN 14995:2007, EN 13432:2000 standard, or equivalent.

Purchase of Gardening products

Ornamental plants

Criteria proposal

TS3. Invasive alien species: *(Note: Preference should be given to plant species native to the area. If alien species are planted, ascertain that they will not become invasive, and take into account local or national policies for the control of invasive alien species, and the European policies on invasive alien species (EU Regulation 1143/2014).)*

Core and Comprehensive criteria: The ornamental plants purchased must be native. If alien species are planted, it shall be ascertained that they will not become invasive.

Verification: The tenderer must provide information (name) of ornamental plants to be supplied.

Explanatory Note: Experts are to be consulted for guidance to determine whether the plant species are native species, or if they are alien, that they will not become invasive if there is limited information on the types of species. In addition, it must be ascertained that the plant species match the local site conditions (soils, hydrology, precipitation, drainage, sun distribution, etc). Local or national lists of invasive plant species, as well as the List of Invasive Alien Species of Union concern detailed in Regulation 1143/2014 must be referred to.

Purchase of Gardening products

Soil improvers

Rationale

- Commission decision (EU) 2015/2099 of 18 November 2015 establishes the ecological criteria for the award of the EU Eco-label for growing media, soil improvers and mulch
- The GPP strategy enhances the selection of low-impact fertilizer and soil improvers, preferring single nutrient fertilizer or calcium ammonium nitrate-based fertilizer, avoiding the use of peat-based fertilizers

Proposal

- The criterion on soil improvers is aligned with the EU Ecolabel for growing media, soil improvers and mulch, for this reason, it is retained with the addition of explanatory notes provided where appropriate, in order to simplify the interpretation and application of the criteria.

Purchase of Gardening products

Soil improvers

Criteria proposal

TS4. Organic constituents of soil improvers and mulch

Core Criteria: The following materials are not allowed as organic constituents of a final product:

- Peat;
- Materials totally or partially derived from the organic fraction of mixed municipal household waste separated through mechanical, physicochemical, biological and/or manual treatment;
- Materials totally or partially derived from sludges derived from municipal sewage water treatment and from sludge derived from the paper industry;
- Materials totally or partially derived from category 1 animal by-products according to Regulation (EC) No 1069/2009.

Verification: Tenderers must provide the detailed composition of the product, the origin of organic matter and a declaration of compliance with the above requirements. Products holding the EU Ecolabel for growing media, soil improvers and mulch in accordance with the Commission Decision 2015/2099/EC or another relevant type I ecolabel fulfilling the listed criteria, will be deemed to comply. Other appropriate means of proof, such as a technical dossier of the manufacturer or a test report of an independent body, will also be accepted.

Purchase of Gardening products

Soil improvers

Criteria proposal

TS4. Organic constituents of soil improvers and mulch

Comprehensive Criteria

- 1) The following materials are allowed as organic constituents of a final product:
 - Materials derived from the recycling of bio-waste from separate collection, as defined in Article 3 of Directive 2008/98/EC of the European Parliament and of the Council;
 - Materials derived from category 2 and 3 animal by-products as laid down in Article 32 of Regulation (EC) No 1069/2009 of the European Parliament and of the Council¹² and technical standards which are laid down by implementing Regulation (EU) 142/2011;
 - Materials derived from fecal matter, straw and other natural non-hazardous agricultural or forestry material as defined in Article 2.1(f) of Directive 2008/98/EC;
 - Materials derived from any other biomass by-products, as defined in article 5 of Directive 2008/98/EC, that are not mentioned above, subject to the provisions of 2) and 3);
 - Materials derived from recycling or recovery of any other biomass waste not mentioned above, subject to the provisions of 2) and 3).
- 2) Besides the materials listed in the core criteria, materials totally or partially derived from sludge other than those allowed in 3) below are not allowed.

Purchase of Gardening products

Soil improvers

Criteria proposal

TS4. Organic constituents of soil improvers and mulch

Comprehensive Criteria

3) Materials derived from recycling or recovery of sludge are only allowed if the sludge comply with the following requirements:

- a) They are identified as one of the following types of waste according to the European List of Wastes, as defined by Decision 2000/532/
- b) They are single-source separated, meaning that there has been no mixing with effluents or sludge outside a specific production process.

Verification Same as core criteria

Explanatory notes

The technical specification on organic constituents of soil improvers is aligned with the terms used by the Waste Framework Directive. They define the legal status of materials, i.e. waste, by-products, agricultural material, etc. which entails legal consequences for their treatment and disposal. Some definitions and examples are listed in the TR2.0

Purchase of Gardening products

Soil improvers

Criteria proposal

TS5. Hazardous substances (heavy metals) in soil improvers

Core and Comprehensive Criteria (*same formulation*):

The content of the following elements in the final product or constituent must not exceed the values shown in the table, measured in terms of dry weight (DW) of the product.

Verification: Same as TS4

Element	mg/kg (dw)
Cadmium (Cd)	1
Chromium total (Cr)	100
Copper (Cu)	100
Mercury (Hg)	1
Nickel (Ni)	50
Lead (Pb)	100
Zinc (Zn)	300

TS6. Physical contaminants in soil improvers

Comprehensive Criteria: The content of glass, metal and plastic with mesh size of > 2 mm (the sum of each contribution) in the final product must not exceed 0.5 %, measured in terms of dry weight.

Verification: Same as TS4

Purchase of Gardening products

Soil improvers

Criteria proposal

TS7. Product performance of soil improvers

Comprehensive Criteria:

- a) Products must not adversely affect plant emergence and subsequent growth;
- b) The organic matter as loss on ignition of the final product must be at least 15% dry weight (% DW);
- c) The dry matter content of the final product must be at least 25% of the fresh weight (% FW).

Verification: Same as TS4

TS8. Primary pathogens in soil improvers

Comprehensive Criteria: The content of primary pathogens in the final product must not exceed the following levels:

- a) Salmonella spp: absent in 25g fresh weight
- b) E.coli: <1000 CFU/g fresh weight (CFU: colony-forming units)

Verification: Same as TS4

Purchase of Gardening products

Soil improvers

Consultation questions

- Do you agree with the alignment of the soil improvers' chapter of EU GPP criteria for Gardening Products and Services with the revised criteria for the EU Ecolabel for growing media, soil improvers and mulch?
- Do you agree with the introduction of a technical specification at Core level (identical to the one at Comprehensive level) limiting heavy metals contents?

Purchase of Gardening products

Automatic irrigation systems

Rationale

- Non-efficient irrigation systems result in loss of water.
- Not all irrigation systems in urban areas are connected with phreatic sources, meaning that high-quality water is used for irrigation.

Proposal

- Proposed criteria is aimed at reducing the water consumption for irrigation
- Following the 1st AHWG meeting, the criterion on Automatic Irrigation is retained as a TS but made clearer to consider concerns on the feasibility of using locally recovered water for irrigation.

Purchase of Gardening products

Automatic irrigation systems

Criteria proposal

TS9. Automatic irrigation

Core and Comprehensive criteria

~~Note: Where irrigation water can be sourced from locally recovered sources, as a combination of rain water, ground water and filtered grey water, the public authority could require the use of these sources.~~

The automatic irrigation systems must allow for detailed parametrization, namely in what concerns:

- Allowing the set-up of different irrigation zones;
- Possibility to adjust the volume of dispensed water by zones;
- Possibility to program watering time periods by zones;
- Possibility to measure soil humidity level and to automatically block the irrigation when it is high enough (as defined by the contracting authority), for example after rain, by zones.

Verification: Tenderers must provide appropriate documentation demonstrating that these criteria are met. The contracting authority will provide the guidelines based on the water resources availability characteristics specific to the climate and location of the irrigation system.

Consultation question

Do you agree with this criterion?

Purchase of Gardening Products

Discussion and questions

Overview Purchase of Gardening services

Second Draft proposal

Hot spots

Use of products

Operational management

Criteria

- Purchase of Ornamental plants and soil improvers
- Pest control and invasive species management
- Watering practices
- Waste management
- Gardening practices and enhancement of biodiversity

Purchase of Gardening services

Use of products and operational management

Rationale

- Good practices of environmental management for garden services have to address:
- Pest control
- Invasive species
- Waste management

Proposal

- Criteria aimed at addressing the enhancement of biodiversity and the promotion of plant species suitable for local planting
- Promote a reduction in the use of chemical plant protection products via use of alternative pest management techniques

Purchase of Gardening services

Use of products

Criteria proposal

TS10. Ornamental plants and soil improvers used for the provision of gardening services

Similar for Core and Comprehensive Criteria:

- The ornamental plants supplied during the provision of the gardening services **must** be compliant with the requirements of the relevant technical specifications (TS1 to TS3) at Core/Comprehensive level.
- The soil improvers used for the provision of the gardening services must be compliant with the requirements of the relevant technical specifications (TS4 and TS5) at Core /Comprehensive level.

Verification: Tenderers must provide the detailed composition of the product, the origin of organic matter and a declaration See the verification of the relevant technical specifications.

Purchase of Gardening services

Operational management

Criteria proposal

TS11. Pest control and invasive alien species management *(This could be combined with an award criterion evaluating the quality of such a plan).*

Core criteria: The tenderer must present an annual Phytosanitary Treatment Plan.

These plans will take into account local or national policies for control of invasive alien species, and of the European policies on invasive alien species (EU Regulation 1143/2014).

The plan must comply with the provisions of EU Directive 2009/128 / EC on the sustainable use of pesticides and according to the local policies on the use of chemicals.

Comprehensive Criteria: The tenderer must present an annual Phytosanitary Treatment Plan, which must only include non-chemical treatment methods such as thermal, mechanical or biological treatments.

These plans will take into account local or national policies for control of invasive alien species, and of the European policies on invasive alien species (EU Regulation 1143/2014).

Verification:

The tenderer must present a Phytosanitary Treatment Plan.

Purchase of Gardening services

Operational management

Criteria proposal

CPC1. Watering practices

Note: The contracting authority needs to specify the use of locally recovered water sources (as a combination of rainwater, ground water and filtered grey water) based on the availability of infrastructure in order to allow the contractor to comply with this contract performance clause.

Core and Comprehensive criteria

Watering practices must:

- Use rain, reclaimed, recycled or phreatic water when technically possible.
- Minimize the use of potable water.
- Apply mulching to avoid evaporation in the areas specified by the contracting authority.
- Use automatic irrigation systems as provided by the contracting authority and fit the volume of dispensed water according with plant needs. In this case the contractor will be in charge of the maintenance of the said irrigation system.

Records of watering practices must be kept and made available to the contracting authority for verification purposes. The contracting authority may set rules for penalties for non-compliance.

Purchase of Gardening services

Operational management

Criteria proposal

CPC2. Waste management (*the contracting authority can/should limit the management options according to the local circumstances*)

Core and Comprehensive criteria: Waste produced during the carrying out of gardening services must be collected separately and managed as follows:

- All organic waste (dry leaves, pruning, grass) must be composted "in-situ", in the company facilities or by contracting out this practice to a waste treatment enterprise.
- Woody organic waste from branches, etc. must be shredded "in situ" or in the company facilities and used as mulching in the agreed areas.
- Packaging waste must be separated into the existing urban waste fractions and placed into the corresponding street containers (*paper, plastic and other - available waste streams to be inserted.*). However, packaging waste of dangerous substances, such as plant protection products, must be disposed of safely in approved collection points or through an authorized waste manager for further treatment.

Records of the management of waste produced during gardening operations must be kept and made available to the contracting authority for verification purposes. The contracting authority may set rules for penalties for non-compliance.

Purchase of Gardening services

Operational management

Criteria proposal

CPC3. Pest control and invasive alien species management

Core and Comprehensive criteria: The contractor will carry out the service according to the *Phytosanitary Treatment Plan* following the Directive 2009/128/EC on sustainable use of pesticides.

The presence of any plants or animals suspected to be invasive must be reported to the contracting authority and adequate control measures must be defined in joint agreement.

Records of plant protection operations for pest control and invasive alien species management actions, including specific techniques and products used **must be kept by professional users following the Regulation (EC) No 1107/2009** and made available to the contracting authority for verification purposes.

The contracting authority may set rules for penalties for non-compliance.

Purchase of Gardening services

Operational management

Criteria proposal

CPC4. Gardening practices and enhancement of biodiversity

*Note: The contracting authority needs to provide the contractor with the practices to be implemented to enhance biodiversity**

Core and Comprehensive criteria: The contractor must carry out gardening practices to enhance biodiversity that may involve a combination of the following:

- ensuring that no species will exceed the X% of all the ornamental plants or trees planted
- developing spontaneous natural flora and fauna**
- implementing best landscaping and forestry activities measures***

Records of plant species introduced, landscaping and forestry activities implemented must be kept and made available to the contracting authority for verification purposes. The contracting authority may set rules for penalties for non-compliance.

Purchase of Gardening services

Operational management

Criteria proposal

Explanatory notes : *The contracting authority will have to specify the maximum percentage of all the ornamental plants or trees planted that should not be exceeded by each species. Recommended values X=15%.*

**Experts are to be consulted to check whether the planted species are native species, or if they are alien, that they will not become invasive. Local or national lists of invasive plant species, as well as the List of Invasive Alien Species of Union concern detailed in Regulation 1143/2014 must be referred to.*

***Where possible, the following practices should be implemented to encourage the development of spontaneous natural flora and fauna:*

- employ nectar-rich native plants able to provide wildlife benefits*
- use just organic means of pest control*
- leave standing decaying wood on site where appropriate to provide a habitat for wildlife*
- encourage the well-being of desired native species*
- mark some of the most visible areas with informative posters that explain the purpose of these measures*

****Landscaping and forestry activities should account for the natural cycle of the plants and the wellbeing of the local fauna, by ensuring that:*

- natural grass areas will, in the main, be cut and maintained as 'meadow grassland'*
- the pruning activities will be carried out outside of the breeding season*
- the isolation of the habitats will be avoided ensuring the continuity of the natural systems where possible*

Purchase of Gardening services

Operational management

Consultation questions

- Do you agree with the criterion on watering practices?
- Do you agree with the requirement of an annual Phytosanitary Treatment Plan for the management of pests and invasive alien species?
- Would the requirement at the comprehensive level that asks to only include non-chemical treatment methods be implementable at the practical level?
- Do you agree with the criterion on gardening practices and enhancement of biodiversity? Do you think that this criterion should be either more specific or stringent?

Purchase of Gardening Services

Discussion and questions

EU GPP Criteria Set Proposal

- Purchase of Machinery for PSM
- Purchase of Vehicles for PSM
- Cleaning activities for PSM
- Gardening activities for PSM
- Common criteria for Service categories

Service Categories

Competence of tenderer and staff training

Rationale

- The tenderer has to show **experience** on identifying, evaluating and implementing **technologies and measures** to reduce the water and energy consumption, GHG emissions and air pollutants emissions.
- The selection criterion is aimed at **ensuring the competences** of the tenderer to carry out the service **according to environmental performance**.
- The criterion on **staff training** requires the staff to be **trained** in the operational procedures set out by the company **to increase their environmental performance**.
- **Optimization of waste management** and **promoting of biodiversity** are included in the list of competences of the tenderer.

Service Categories

Competence of tenderer and staff training

Criteria proposal

SC1. Competences of the tenderer

Core and Comprehensive criteria:

The tenderer must have relevant competences and experience in providing environmentally conscious maintenance services that, at a minimum, included the following:

- 1) use of products that have been awarded the EU Ecolabel or other relevant EN ISO 14024 type I ecolabels that are nationally or regionally officially recognised in the Member States for the cleaning tasks in a contract
- 2) internal or external staff training that covers environmental aspects such as correct product dilution and dosage use, discarding of wastewater and waste sorting,

Service Categories

Competence of tenderer and staff training

Criteria proposal

- 3) identifying, evaluating and implementing the best available technologies and measures (if applicable to the specific service provided) aimed at:
- Minimising water and energy consumption,
 - Minimising GHG emissions and air pollutants emissions
 - Minimising waste generation
 - **Optimising waste management**
 - Minimising use of pesticides, including herbicides
 - Minimising use of fertilisers
 - Minimising use of cleaning products
 - Minimising use of de-icing products
 - **Protecting and promoting biodiversity**
- 4) monitoring and reporting procedures of the environmental issues listed above.

Verification: Tenderers must provide evidence in the form of information and references in relevant contracts, carried out in the previous 5 years, which included the above elements. This must be supported by records of staff training activities, where the subjects covered are listed.

Service Categories

Competence of tenderer and staff training

CPC1. Staff training

- **Core and Comprehensive Criteria**

For the duration of the contract, the **contractor must have in place an internal staff training programme** or provide staff with the means to participate in an external training programme that covers the topics listed below, where they are pertinent to the tasks performed by the staff member, as part of the contract:

For the provision of Gardening services:

- Staff must be trained on gardening practices with less environmental impact to be applied in carrying out the service. This should include at least water and energy saving practices; waste minimization, management and selective collection, **protection of biodiversity**, use of products based on renewable raw materials; chemical product and container handling and management; safe, legal use of pesticides including herbicides.
- Training in critical applications, including the use of chemicals, must be undertaken before the staff allowed to undertake that type of work.

The contractor must present a training plan once the contract is awarded.

Service Categories

Competence of tenderer and staff training

Criteria proposal

For the provision of Cleaning services:

- Staff must be trained on cleaning practices with less environmental impact to be applied in carrying out the service. This should include water and energy saving practices; waste minimization, PM10 street dust reduction, minimisation of consumable goods and safe use of chemicals.
- Training in critical applications, including the use of chemicals, must be undertaken before any staff is allowed to undertake that type of work.

The contractor must present a training plan once the contract is awarded.

For the operation of machinery and vehicles:

- All operators of machinery and vehicles involved in carrying out the service must be sufficiently trained to deliver the contracted service in an environmentally responsible manner through the efficient utilization of the equipment.
- All operators of machinery and vehicles involved in carrying out the service for the duration of the contract period must receive regularly information on their fuel efficiency performance (at least once per month).

The yearly staff training records must be made available to the contracting authority for verification purposes. The contracting authority may set rules for penalties for non-compliance

Service Categories

Competence of tenderer and staff training

Criteria proposal

Explanatory notes

Recommended values

For permanent staff and temporary staff with contracts exceeding 1 year: 16h of initial training, 8h of training as part of annual updates.

For temporary staff with contracts that do not exceed 1 year: 8h of initial training.

The duration of the training can be adjusted to the needs and conditions of the tenders.

Service Categories

Competence of tenderer and staff training

Discussion and questions

Service Categories

Environmental management measures

Rationale

- An **environmental management system** (EMS) is a **systematic way** to minimise the environmental issues of an organisation.
- Certified EMS might be particularly difficult to be achieved by SMEs which may lead to their exclusion of the tender process → not required but are valid as proof of compliance
- It is proposed a **technical specification** inspired on the plan-do-check-act (PDCA) principles which constitute the basis of the management systems.
- **Promotion of biodiversity** and the proper **maintenance of machinery and vehicle fleets** are included in the environmental management measures.
- **Contract performance clause** have been proposed to ensure the implementation of the environmental management measures, setting **penalties but also bonus** .

Service Categories

Environmental management measures

Criteria proposal

TS1. Environmental management measures

- **Core and Comprehensive.** The tenderers must have written procedures to:
 - 1) Monitor, record and implement measures for the following:
 - Minimising GHG and air pollutant emissions
 - Minimising energy consumption
 - Minimising water consumption
 - Minimising products consumption (e.g. cleaning products, mineral and organic fertilisers, pesticides, de-icing products)
 - Minimising waste generation
 - **Enhancing biodiversity**
 - 2) **Maintain the vehicles fleet and the machinery fleet according to the manufacturers recommendations.**
 - 3) Evaluate the deployment of the plan and operational procedures, by tracking the evolution of indicators* and the implementation of the measures and procedures in real practice.
 - 4) Implement the necessary actions to correct deviations from the plan, and if possible prevent them in the future.

Service Categories

Environmental management measures

Criteria proposal

Verification: The tenderer must provide a copy of the said written procedures.

Environmental management systems certified against EU Eco-management and Audit Scheme (EMAS) or ISO 14001 will be deemed to comply, if they cover the environmental objectives listed in the technical specification and its scope includes the services that constitute the subject matter of the call for tender. The tenderer must provide the environmental policy showing the commitment to achieve these objectives, together with the certificate issued by the certification body where the scope is disclosed.

Note: the contracting authority may points at award stage to those tenders offering significant improvements in their environmental management measures.

Explanatory notes:

**The indicators to monitor the environmental issues are recommended to be based on the functional unit 'm2 of maintained area'. The minimum monitoring frequency recommended is once per season during representative weeks. A representative week means a week where the level of activity is approximately the average of each season.*

In case of biodiversity, the ideal indicator would be objective-based, for example, an objective may be increasing the population of passerines. In that case, it is recommended to set indicators for the actions carried out to accomplish the objective: number of occupied nest boxes, increment of tree density and patch connectivity, etc.

Service Categories

Environmental management measures

Criteria proposal

CPC2. Environmental management measures

Core and Comprehensive. The contractor must document and report, over the contract duration:

- the results of the monitoring of indicators
- the maintenance activities
- the results of the evaluation and the correction and prevention actions, where applicable, according to the written procedures provided for the verification of the TS1 Environmental management measures

These reports must be made available to the contracting authority for verification purposes.

The contracting authority may set rules for penalties for non-compliance and bonuses for exceeding the objectives set by the procedures to optimise the environmental issues.

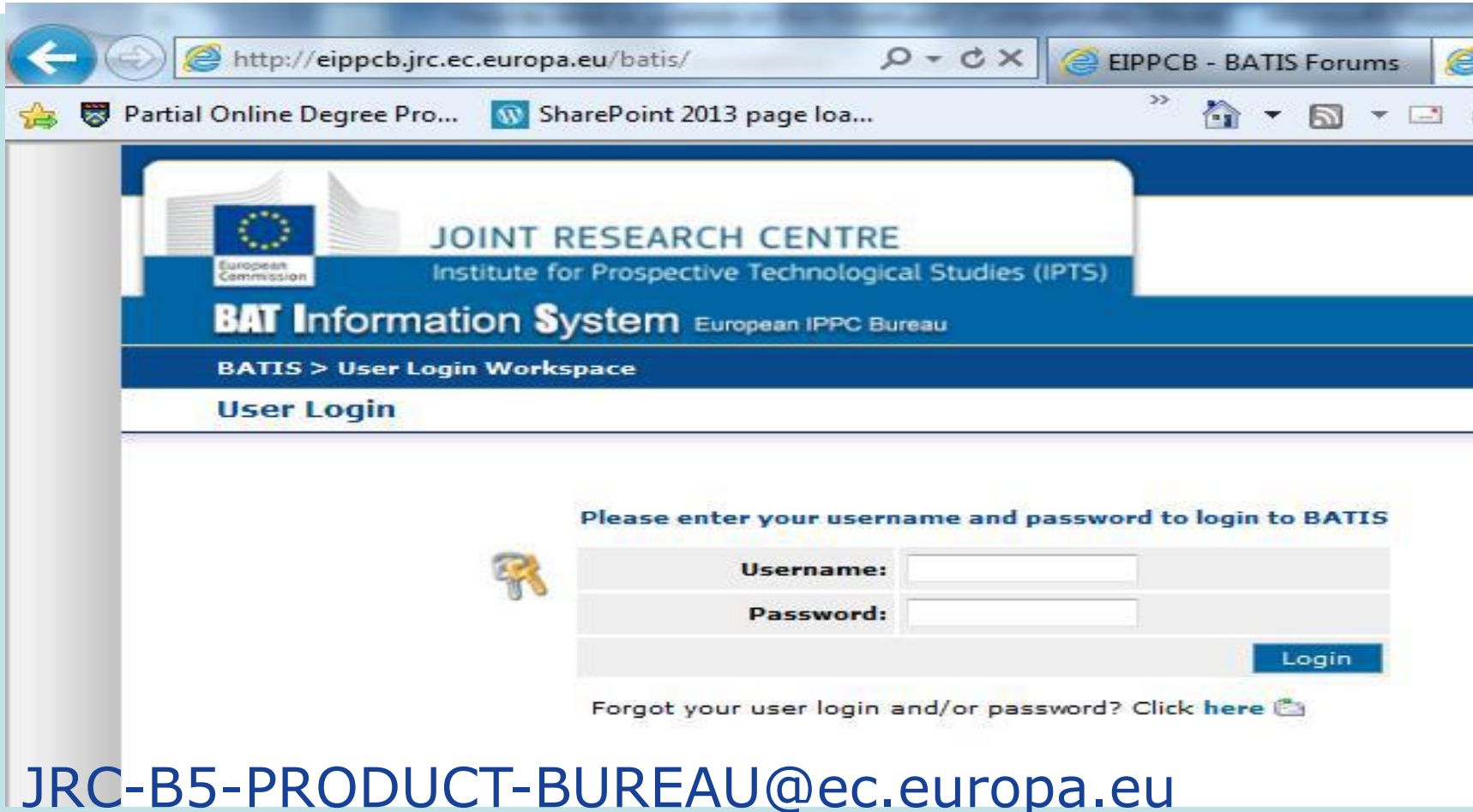
Service Categories

Environmental management measures

Discussion and questions

Comments using the BATIS system

Written comments on the second criteria proposals are invited and should be posted on the BATIS system **at the latest by Monday 16th July 2018**



The screenshot shows a web browser window with the URL <http://eippcb.jrc.ec.europa.eu/batis/>. The page header includes the European Commission logo and the text "JOINT RESEARCH CENTRE Institute for Prospective Technological Studies (IPTS) BAT Information System European IPPC Bureau". The main heading is "BATIS > User Login Workspace" followed by "User Login". The login form contains the instruction "Please enter your username and password to login to BATIS" and a key icon. It has two input fields: "Username:" and "Password:". A "Login" button is located to the right of the password field. Below the form is a link: "Forgot your user login and/or password? Click [here](#)".

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Any questions?

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