



Council of the
European Union

Brussels, 19 October 2021
(OR. en)

12971/21

MAP 27
MI 749
TRANS 612
ENV 759

COVER NOTE

From:	Secretary-General of the European Commission, signed by Ms Martine DEPREZ, Director
date of receipt:	18 October 2021
To:	Mr Jeppe TRANHOLM-MIKKELSEN, Secretary-General of the Council of the European Union
No. Cion doc.:	SWD(2021) 296 final
Subject:	COMMISSION STAFF WORKING DOCUMENT EU green public procurement criteria for road transport

Delegations will find attached document SWD(2021) 296 final.

Encl.: SWD(2021) 296 final



Brussels, 18.10.2021
SWD(2021) 296 final

COMMISSION STAFF WORKING DOCUMENT

EU green public procurement criteria for road transport

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1 INTRODUCTION

EU green public procurement (GPP) criteria are designed to make it easier for public authorities to purchase goods, services and works with reduced environmental impacts. The use of the criteria is **voluntary**. The criteria are formulated in such a way that they can, if deemed appropriate by the individual authority, be (partially or fully) integrated into the authority's tender documents with minimal editing. Before publishing a call for tender, public authorities are advised to check the available offer of the goods, services and works they plan to purchase on the market where they are operating. When a contracting authority intends to use the criteria suggested in this document, it shall do so in a way that ensures compliance with the requirements of EU public procurement legislation (see, for instance, Articles 42, 43, 67(2) or 68 of Directive 2014/24 and similar provisions in other EU public procurement legislation). Practical considerations in this area are discussed in the 2016 handbook on buying green, available at: http://ec.europa.eu/environment/gpp/buying_handbook_en.htm

This document lists the EU GPP criteria for road transport. An accompanying [technical report](#) provides the full rationale for selecting these criteria and gives references for further information. The criteria are split into: (i) selection criteria, (ii) technical specifications, (iii) award criteria, and (iv) contract performance clauses. There are two types of criteria:

- **Core criteria** — *which are designed to allow easy application of GPP, focusing on the key area(s) of a product's environmental performance and aiming to keep companies' administrative costs to a minimum.*
- **Comprehensive criteria** — *which take into account more aspects or higher levels of environmental performance, for use by authorities that want to go further in supporting environmental and innovation goals.*

The wording 'same for core and comprehensive criteria' is used when the criteria are identical for both types.

1.1 Definition and Scope

The product group ‘road transport’ includes the following categories of vehicles and services:

Category 1: ‘Purchase, lease or rental of cars, light commercial vehicles (LCVs) and L-category vehicles’:

- ‘cars and LCVs’: M1 and N1 vehicles, as defined by Regulation (EU) 2018/858;
 - ‘L-category’ vehicles, as defined by Regulation 168/2013.
- Special purpose vehicles such as armoured vehicles are excluded from the scope.

Category 2: ‘Mobility services’:

- ‘special-purpose road passenger-transport services’, as covered by common procurement vocabulary (CPV) code 60130000-8
- ‘non-scheduled passenger transport’, as covered by CPV code 60140000-1; this should cover contracted public transport services (public transport contracted out to taxi companies, i.e. transport carried out for pupils/students who are not able to travel by themselves);
- ‘hire of buses and coaches with driver’, as covered by CPV code 60172000-3;
- ‘taxi services’, as covered by CPV code 60120000-5;
- ‘car sharing’, where an organisation owns the vehicles and the platform; this is usually more standardised and reliable than peer services, and some carmakers have an associated car sharing company;
- ‘combined mobility services’ (CMS), which are based on a new business model that offers users a wide range of combined mobility options based on a subscription and unified invoicing, sometimes as a package adapted to the customer’s specific needs, for example, a package of trips usually done during a week; these CMS are supported by some form of digital interface that the customer can use (app, web-based service, etc.);
- ‘cycles’: bicycles (CPV codes 34430000-0 and 34431000-7), cycle trailers, electrically power-assisted cycles (CPV code 34420000-7);
- ‘light electric vehicles and self-balancing vehicles’ whose specific definitions are under development by CEN/TC 354 /WG 4.

Definitions of cars, LCVs, L-category vehicles and buses also apply to this category

Category 3 ‘Purchase or lease of heavy duty vehicles’:

- ‘M₂ and M₃ vehicles, as defined by Regulation (EU) 2018/858;
 - o .Category M₂: vehicles designed and constructed for the carriage of passengers, comprising more than eight seats in addition to the driver’s seat, and having a maximum mass not exceeding 5 tonnes;

- Category M₃: vehicles designed and constructed for the carriage of passengers, comprising more than eight seats in addition to the driver's seat, and having a maximum mass exceeding 5 tonnes.
- N₂ and N₃ vehicles, as defined by Regulation (EU) 2018/858, i.e. trucks, including waste collection vehicles.

Category 4: 'Road transport services':

- This category covers the outsourcing of the following road transport services for which contracting authorities are responsible:
 - 'bus services' or 'public transport services': these should be defined as those covered by Regulation (EC) No 1370/2007 and/or CPV codes 60112000-6 (public road transport services);
 - 'waste collection services': these should be defined as those covered by CPV categories of 'refuse collection services' (90511000-2) and 'refuse transport services' (90512000-9);
 - 'post and courier services': these should be defined as those covered by CPV categories of Group 641 'post and courier services', with the exception of rail, airmail and mail transport over water.

Category 5: 'Post, courier and moving services':

- This category covers the procurement (not the outsourcing) of post, courier and moving services, which comprise:
 - Group 641 'post and courier services', with the exception of rail, airmail and mail transport over water;
 - 79613000-4 employee relocation services;
 - 63100000-0 cargo handling and storage services;
 - 98392000-7 relocation services.

Please refer to the [technical report](#) for details and further technical definitions.

1.2 General note on verification

For a small number of criteria, the proposed way to verify that they have been fulfilled is through test reports. For each of these, the test methods to be used have been specified. It is up to each public authority to decide at which stage such test results should be provided. In general, it does not seem necessary to require all tenderers to provide test results from the outset. To reduce the burden on tenderers and public authorities, a self-declaration could be considered sufficient when submitting bids. Different options for if and when these tests could be required are discussed below:

a) At the tendering stage:

For *one-off supply contracts*, the bidder with the most economically advantageous tender could be required to provide this proof. If the proof is deemed to be sufficient, the contract can be awarded. If the proof is deemed insufficient or non-compliant, then:

- i) where the means of verification concerns a technical specification, the proof would be requested from the next highest scoring bidder who would then be considered for contract award;
- ii) where the means of verification concerns an award criterion, the additional points awarded would be removed and the tender ranking would be recalculated with all the ensuing consequences applying.

Note that a test report verifies that a sample product meets certain requirements, not the items actually delivered under the contract. For framework contracts, the situation may be different. This scenario is covered further in the next point on contract execution and in the additional explanations below.

b) During contract execution:

Test results could be requested for one or several items delivered under the contract, either in general or only if there are concerns about possible false declarations. This is particularly important for framework contracts that do not stipulate an initial order.

It is recommended to set explicit contract performance clauses. These should stipulate that the contracting authority is entitled to carry out random verification tests at any time during the term of the contract. If the results of such tests show that the delivered products do not meet the criteria, the contracting authority is entitled to apply penalties and may terminate the contract. Some public authorities include conditions that if, following the tests, the product is meeting their requirements, the testing costs will be borne by the public authority itself, but if the requirements are not met, the costs must be borne by the supplier.

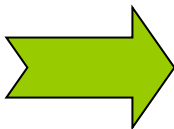
For *framework agreements*, the point at which proof has to be provided will depend on the specific set-up of the contract:

- i) For framework agreements with a single operator where the individual items to be delivered are identified when awarding the framework agreement, and where it is just a question of how many units will be needed, the same considerations apply as for the one-off supply contracts described above
- ii) For framework agreements that pre-select several potential suppliers with ensuing competition among those pre-selected, at this initial pre-selection stage tenderers will only need to show their capability to deliver items meeting the minimum performance requirements of the framework agreement. For any call-down contracts (or orders) that are awarded following the competition among the pre-selected suppliers, and if additional requirements have to be proven, in principle the same considerations as under a) and b) above should apply. If the competition is decided only based on price, then a check at the contract execution stage should be considered.

Please also note that, according to Article 44 (2) of Directive 2014/24/EU, contracting authorities must also accept other appropriate means of proof. One example could be a manufacturer's technical documentation where the economic operator concerned had no access to test reports or no possibility of obtaining them within the relevant time limits. Such documents could be accepted under the condition that the lack of access was not attributable to the economic operator concerned and if the economic operator proves that the works, supplies or services provided meet the requirements or criteria set out in the technical specifications, the award criteria or the contract performance conditions. If there is a reference to a certificate/test report drawn up by a specific conformity assessment body for the execution of the tests, contracting authorities must also accept certificates/test reports issued by other equivalent assessment bodies.

2 KEY ENVIRONMENTAL IMPACTS

Based on the available scientific evidence, the main environmental impacts of road transport from the product lifecycle perspective are summarised in the table below (for further details, see the [technical report](#)). The same table also presents the EU GPP approach to mitigating or reducing these impacts.

Key environmental impacts during a product's lifecycle	EU GPP approach
<ul style="list-style-type: none"> greenhouse gas (GHG) and air pollutant emissions produced by energy consumption during the use phase, GHG and air pollutant emissions produced along the supply chain of the energy carriers, environmental impacts produced during the manufacture of batteries for electric vehicles, noise emissions produced by the vehicle and tyres during the use phase. 	 <ul style="list-style-type: none"> require criteria on type-approval CO₂ emissions for cars and LCVs, and specific technologies for heavy-duty vehicles and L-category vehicles, require criteria based on air pollutant emissions performance for cars and LCVs, and specific technologies for heavy-duty vehicles and L-category vehicles, require criteria on rolling resistance of tyres, require criteria on energy efficiency of electric cars and LCVs, require criteria on battery warranties, require criteria on vehicle and tyres noise emissions, require service providers to have key competences and to apply key environmental management measures and practices, require service providers to provide adequate and frequent training for their staff, require criteria on tyres and lubricants for maintenance activities.

The order of impacts does not necessarily reflect their magnitude.

Detailed information about road transport, including on related legislation, standards and technical sources used as evidence, can be found in the [technical report](#).

3 CRITERIA STRUCTURE

The criteria have been divided into the following sections:

- Category 1: Purchase, lease or rental of cars, LCVs and L-category vehicles
- Category 2: Procurement of mobility services
- Category 3: Purchase or lease of heavy duty vehicles
- Category 4: Outsourcing of public road transport services
- Category 5: Procurement of post, courier and moving services
- Common criteria for vehicle categories
- Common criteria for service categories

	No	Criterion	Core	Comprehensive
CATEGORY 1: ‘PURCHASE, LEASE OR RENTAL OF CARS, LIGHT COMMERCIAL VEHICLES (LCVS) AND L-CATEGORY VEHICLES’: SUBJECT MATTER: <ul style="list-style-type: none"> - ‘Cars and LCVs’: M1 and N1 vehicles, as defined by Regulation (EU) 2018/858; - ‘L-category’ vehicles as defined by Regulation 168/2013. 				
TECHNICAL SPECIFICATIONS	TS1	CO ₂ emissions and energy efficiency	X	X
	TS2	Air pollutant emissions	X	X
	TS3	Energy consumption displays	X	X
	TS4	Traffic information and route optimisation		X
	TS5	Minimum warranty of the battery	X	X
AWARD CRITERIA	AC1	Lower CO ₂ emissions	X	X
	AC2	Energy efficiency	X	X
	AC3	Improved air pollutant emissions performance	X	
	AC4	Zero tailpipe emission capability	X	
	AC5	Speed limiter		X
	AC6	Extended warranty		X

CATEGORY 2: PROCUREMENT OF MOBILITY SERVICES				
SUBJECT MATTER:				
Purchase of special-purpose bus services, non-scheduled bus services, hire of buses and coaches with driver services, taxi services, car sharing services and combined mobility services with low environmental impact				
TECHNICAL SPECIFICATIONS	TS1	Type-approval CO ₂ value	X	X
	TS2	Air pollutant emissions	X	X
AWARD CRITERIA	AC1	CO ₂ emissions	X	X
	AC2	Air pollutant emissions	X	X
CATEGORY 3: PURCHASE OR LEASE OF HEAVY DUTY VEHICLES				
SUBJECT MATTER:				
Purchase or lease of heavy-duty vehicles defined as M2, M3, N2 and N3 vehicles by Regulation (EU) 2018/858, i.e. buses and trucks, including waste collection vehicles, with low environmental impact.				
TECHNICAL SPECIFICATIONS	TS1	Technological options to reduce GHG emissions	X	X
	TS2	Air pollutant emissions	X	X
	TS3	Auxiliary units	X	X
	TS4	Exhaust pipes	X	X
AWARD CRITERIA	AC1	Technological options to reduce GHG emissions	X	X
	AC2	Air conditioning gases		X
	AC3	Improved air pollutant emissions performance	X	
	AC4	Auxiliary units		X
CATEGORY 4: OUTSOURCING OF ROAD TRANSPORT SERVICES				
SUBJECT MATTER:				
Outsourcing of the following road transport services for which contracting authorities are responsible:				
<ul style="list-style-type: none"> – ‘bus services’ or ‘public transport services’: these should be defined as those covered by Regulation (EC) No 1370/2007 and/or CPV codes 60112000-6 (public road transport services); – ‘waste collection services’: these should be defined as those covered by the CPV categories of ‘refuse collection services’ (90511000-2) and ‘refuse transport services’ (90512000-9); – ‘post and courier services’: these should be defined as those covered by the CPV categories of Group 641 ‘post and courier services’, with the exception of rail, airmail and mail transport over water. 				

TECHNICAL SPECIFICATIONS	TS1	Technological options to reduce GHG emissions	X	X
	TS2	Cyclelogistics	X	X
	TS3	Tyres - rolling resistance	X	X
	TS4	Tyre pressure monitoring systems (TPMS)	X	X
	TS5	Fuels	X	X
	TS6	Air pollutant emissions	X	X
AWARD CRITERIA	AC1	Technological options to reduce GHG emissions	X	X
	AC2	Air pollutant emissions	X	X
	AC3	Auxiliary units	X	X
	AC4	Noise emissions		X
CONTRACT PERFORMANCE CLAUSE	CPC1	New vehicles	X	X
CATEGORY 5: PROCUREMENT OF POST, COURIER AND MOVING SERVICES (PROCUREMENT) SUBJECT MATTER: Procurement (not outsourcing) of post, courier and moving services with low environmental impact, which comprise: <ul style="list-style-type: none"> – Group 641 Post and courier services, with the exception of rail, airmail and mail transport over water; – 79613000-4 Employee relocation services; – 63100000-0 Cargo handling and storage services; – 98392000-7 Relocation services. 				
TECHNICAL SPECIFICATIONS	TS1	Type-approval CO ₂ value	X	X
	TS2	Cyclelogistics		X
	TS3	Air pollutant emissions	X	X
AWARD CRITERIA	AC1	CO ₂ emissions	X	X
	AC2	Air pollutant emissions	X	X
COMMON CRITERIA FOR VEHICLES CATEGORIES SUBJECT MATTER: Category 1: Purchase, lease or rental of cars, LCVs and L-category vehicles Category 3: Purchase or lease of heavy-duty vehicles				
TECHNICAL SPECIFICATIONS	TS1	Tyre pressure monitoring systems (TPMS)	X	X
	TS2	Vehicle tyres – rolling resistance	X	X

	TS3	Tyres – rolling resistance	X	X
	TS4	Vehicle specific eco-driving information	X	X
	TS5	Tyre noise		X
AWARD CRITERIA	AC1	Vehicle noise		X
COMMON CRITERIA FOR SERVICE CATEGORIES SUBJECT MATTER: Category 2: Procurement of mobility services Category 4: Outsourcing of public road transport services Category 5: Procurement of post, courier and moving services				
SELECTION CRITERIA	SC1	Competences of the tenderer	X	X
TECHNICAL SPECIFICATIONS	TS1	Environmental management measures	X	X
AWARD CRITERIA	AC1	Lubricant oils, hydraulic fluids and grease		X
CONTRACT PERFORMANCE CLAUSES	CPC1	Driver training	X	X
	CPC2	Environmental management measures	X	X
	CPC3	Low viscosity lubricant oils	X	X
	CPC4	Vehicle tyres – rolling resistance	X	X
	CPC5	Tyre noise		X

4 EU GPP CRITERIA FOR THE PURCHASE, LEASE OR RENTAL OF CARS, LIGHT COMMERCIAL VEHICLES (LCVS) AND L-CATEGORY VEHICLES (CATEGORY 1)

4.1 Subject matter

SUBJECT MATTER
Purchase, lease or rental of cars, light commercial vehicles (LCVs) and L-category vehicles with low environmental impact. Special purpose vehicles such as armoured vehicles are excluded.

4.2 Technical specifications and award criteria

Important: Common criteria for vehicle categories (Section 9) also apply to this category

Core criteria	Comprehensive criteria								
TECHNICAL SPECIFICATION (TS)									
<p>TS1. Type-approval CO₂ value Vehicles' type-approval CO₂ emissions must not exceed the following values:</p> <table> <tr> <th>Vehicle type</th><th>CO₂ g/km</th></tr> <tr> <td>All M1 and N1 vehicles</td><td>Until 31 December 2025: 50 (WLTP¹) From 1 January 2026: 0</td></tr> </table> <p>L-category vehicles must be battery electric. Verification: The tenderer must provide the vehicle's certificate of conformity.</p>	Vehicle type	CO ₂ g/km	All M1 and N1 vehicles	Until 31 December 2025: 50 (WLTP ¹) From 1 January 2026: 0	<p>TS1. Type-approval CO₂ value Vehicles' type-approval CO₂ emissions must not exceed the following values:</p> <table> <tr> <th>Vehicle type</th><th>CO₂ g/km</th></tr> <tr> <td>All M1 and N1 vehicles</td><td>0</td></tr> </table> <p>L-category vehicles must be battery electric. Verification: The tenderer must provide the vehicle's certificate of conformity.</p>	Vehicle type	CO ₂ g/km	All M1 and N1 vehicles	0
Vehicle type	CO ₂ g/km								
All M1 and N1 vehicles	Until 31 December 2025: 50 (WLTP ¹) From 1 January 2026: 0								
Vehicle type	CO ₂ g/km								
All M1 and N1 vehicles	0								

<p>TS2. Air pollutant emissions</p> <p><i>Note: this criterion applies to M_1 and N_1 vehicles with a reference mass¹⁾ not exceeding 2 610 kg. M_1 and N_1 vehicles with a reference mass exceeding 2 610 kg will have to comply with TS2 air pollutant emissions values of category 3 (Section 6.2).</i></p> <p>Until 31 December 2025:</p> <p>The real driving emissions (RDE) of all new cars and LCVs must not exceed 0.8 times the Euro 6 limit values for NO_x and PN (not including the applicable measurement margin²⁾).</p> <p><i>Vehicles purchased for use in areas with air quality issues³ must have zero tailpipe emissions.</i></p> <p>From January 2026:</p> <p>Vehicles must have zero tailpipe emissions.</p> <p>Verification:</p> <p>The tenderer must provide the vehicle's certificate of conformity.</p>	<p>TS2. Air pollutant emissions</p> <p>Vehicles must have zero tailpipe emissions.</p> <p>Verification:</p> <p>The tenderer must provide the vehicle's certificate of conformity.</p>
<p>TS3. Energy consumption display (Same for core and comprehensive criteria)</p> <p>The vehicles must be equipped with a mechanism that shows the driver their fuel consumption figures.</p> <p>Verification:</p> <p>The tenderer must provide the vehicle's technical sheet that includes this information.</p>	
	<p>TS4. Traffic information and route optimisation</p> <p><i>Note: Contracting authorities may request that this criterion be fulfilled if the vehicle will be used in urban areas with congestion issues or driven to places that the drivers are not familiar with, and if no other information</i></p>

	<p><i>system (e.g. a smartphone) is available.</i></p> <p><i>Note: This criterion will not apply to vehicles used for special purposes that require a high level of floating car data protection, e.g. security forces fleets, official vehicles used by members of the government, etc.</i></p> <p>Vehicles must be equipped with traffic information and route optimisation systems that provide the driver with pre-trip information services to help them avoid traffic and make choices that optimise their route. The system must be an embedded system, i.e. a complete communication module consisting of a modem and a subscriber identity module (SIM), permanently integrated into the car.</p> <p>Verification:</p> <p>The tenderer must provide the vehicle's technical sheet that includes this information.</p>
<p>TS5 Minimum warranty (Same for core and comprehensive)</p> <p>The tenderer must provide a minimum battery warranty that ensures 160 000 km or 8 years of capacity of at least 70% of its original rated capacity at delivery, according to EN 62660¹, including for normal gradual degradation due to use.</p> <p>Verification:</p> <p>The tenderers must present a declaration with the warranty terms.</p>	
<p>AWARD CRITERIA (AC)</p>	
<p>AC1. Lower CO₂ emissions (same for core and comprehensive)</p> <p>Until 31 December 2025: points will be awarded to vehicles with lower type-approval CO₂ emissions than those required in TS1, in proportion to the reduction achieved.</p> <p>Verification:</p> <p>See above TS1</p>	

AC2 Energy efficiency

(same for core and comprehensive)

Points will be awarded to vehicles with lowest energy consumption expressed in kWh/100km according to the WLTP test procedure. The following formula will apply:

$$Points_{offer} = \frac{Energy_{highest} - Energy_{offer}}{Energy_{highest} - Energy_{lowest}} \times Points_{max}$$

Where

- *Points_{offer} is the number of points awarded to the offer under evaluation*
- *Energy_{highest} and Energy_{lowest} are the highest and lowest energy consumption expressed in kWh/100km among the submitted offers*
- *Points_{max} is the maximum number of points that can be awarded*

Verification:

The tenderer must provide the vehicle's certificate of conformity.

AC3. Improved air pollutant emissions performance

Note: this criterion applies to M₁ and N₁ vehicles with a reference mass not exceeding 2 610 kg. M₁ and N₁ vehicles with a reference mass exceeding 2 610 kg will have to comply with AC3 improved air pollutant emissions performance levels of category 3 (Section 6.2).

Until 31 December 2025:

Points will be awarded proportionally to air polluting emissions performance to vehicles that have an RDE level better than the Euro 6 limit values for NOx and PN (not including the applicable measurement margin).

Points will be awarded based on the following formula:

$$Points = \left(\frac{NOx_{high} - NOx}{NOx_{high} - NOx_{low}} \right) \times PNOx_{max} + \left(\frac{PN_{high} - PN}{PN_{high} - PN_{low}} \right) \times PPN_{max}$$

<p>Where</p> <ul style="list-style-type: none"> • NOx_{high} and NOx_{low} are the highest and lowest NOx emissions in mg/km among the submitted offers • PN_{high} and PN_{low} are the highest and the lowest PN emissions in #/km among the submitted offers • NOx and PN are the NOx and PN emissions of the offer being evaluated • $PNOx_{max}$ and PPN_{max} are the maximum points to be awarded for each air pollutant <p>Verification: The tenderer must provide the vehicle's certificate of conformity.</p>	
<p>AC4. Zero tailpipe emission capability <i>Note: this criterion applies to M_1 and N_1 vehicles with a reference mass not exceeding 2 610 kg. M_1 and N_1 vehicles with a reference mass exceeding 2 610 kg will have to comply with the AC3 improved air pollutant emissions performance levels of category 3 (Section 6.2).</i> Until 31 December 2025: Points will be awarded to those vehicles that are capable of driving with zero tailpipe emissions, according to the WLTP range that the vehicle can travel without any tailpipe emissions above the default range set by the local authority. <i>The contracting authority will set the minimum zero tailpipe emissions WLTP range reference threshold according to the expected use profiles in the call for tender (a proposed default range could be 50 km⁴). Vehicles that are not equipped with an internal combustion engine will be awarded more points than those equipped</i></p>	

<p><i>with an internal combustion engine.</i></p> <p>Verification: The tenderer must provide the vehicle's certificate of conformity.</p>	
	<p>AC5. Speed limiter</p> <p>Points will be awarded to vehicles equipped with a speed limiting device, i.e. an on-board device that automatically limits a vehicle's speed to a certain maximum.</p> <p>Verification: The tenderer must present the vehicle's technical sheet that includes this information.</p>
<p>AC6 Extended warranty (Same for core and comprehensive)</p> <p>Points will be awarded to tenders that offer an extension of the minimum warranty set by the TS5 minimum warranty in proportion to the value of the extension.</p> <p>Verification: Same as TS5</p>	

4.3 Explanatory notes

Explanatory notes
<p>TS1. Type-approval CO₂ value</p> <p>¹⁾ <i>WLTP: world harmonised light-duty vehicle test procedure</i></p>
<p>TS2. Air pollutant emissions</p> <p>¹⁾ <i>'Reference mass' means the mass of the vehicle in running order, as declared in the certificate of conformity, minus a standard 75 kg mass of the driver, plus a standard mass of 100 kg;</i></p> <p>²⁾ <i>The RDE values are the declared maximum RDE values, as reported in point 48.2 of the Certificate of Conformity and described in Annex VIII of</i></p>

Commission Implementing Regulation (EU) 2020/683 as mg/km or particle number/km, as appropriate. They do not include the measurement margin, which is only linked with uncertainties related to the measurement equipment. This is because the uncertainty margin of 0.43, as currently set in legislation, will be gradually reduced. Therefore, if a manufacturer declares a value with today's applicable margin added (i.e. value+margin 2021), and the margin is subsequently lowered in 2022, their declaration would be at a disadvantage compared to that of a manufacturer who makes their declaration in 2022 (i.e. value+margin 2022), even though the two cars would have the same emissions.

The table below lists the RDE NOx max and PNmax limit values needed to qualify under the EU GPP criteria, with which the values declared in the vehicle's certificate of conformity will have to comply.

From 1 January 2021	<i>M and N1 Class I</i>		<i>N1 class 2</i>		<i>N1 class III</i>	
	<i>Diesel</i>	<i>Gasoline</i>	<i>Diesel</i>	<i>Gasoline</i>	<i>Diesel</i>	<i>Gasoline</i>
<i>NOx (mg/km)</i>	64	48	84	60	100	66
<i>PN (#/km)</i>	5 x 10 ¹¹	5 x 10 ¹¹	5 x 10 ¹¹	5 x 10 ¹¹	5 x 10 ¹¹	5 x 10 ¹¹

³⁾ Areas with air quality issues are those areas where traffic restriction measures are put in place to comply with the air pollutant emissions limits set by the Air Quality Directive (Directive 2008/50/EC)

⁴⁾ Since electromobility is evolving very quickly, contracting authorities are recommended to update the minimum range according to the market evolution.

TS5 Minimum warranty

¹⁾ The technology of electric vehicles is evolving very quickly towards more durable and reliable batteries. For that reason, the thresholds proposed in this criterion should be cross-checked with the options available in the market at the moment of publishing the call for tenders.

5 EU GPP CRITERIA FOR MOBILITY SERVICES (CATEGORY 2)

5.1 Subject matter

SUBJECT MATTER
Purchase of special-purpose bus services, non-scheduled bus services, hire of buses and coaches with driver services, taxi services, car-sharing services and combined mobility services with low environmental impact.

5.2 Technical specifications and award criteria

Important: Common criteria for service categories (Section 10) also apply to this category

Core criteria	Comprehensive criteria
TECHNICAL SPECIFICATION	
<p>TS1. Type-approval CO₂ value <u>Cars and vans</u> The fleet must be composed of vehicles that do not exceed the following type-approval CO₂ value:</p> <ul style="list-style-type: none"> Until 31 December 2025: 50 (WLTP) From 1 January 2026: 0 <p>In the following shares:</p> <ul style="list-style-type: none"> 1.25x share of the public procurement set by revised Clean Vehicles Directive¹ (CVD) for the country. <p><u>L-category vehicles</u> must be battery electric.</p> <p><u>HDVs</u> The fleet must be composed of the following share of vehicles equipped with one of the eligible technologies listed among the core</p>	<p>TS1. Type-approval CO₂ value <u>Cars and vans</u> The fleet must be composed of vehicles that do not exceed 0 g/km, in the following shares:</p> <ul style="list-style-type: none"> 1.5 x share of the public procurement set by revised CVD for the country. <p><u>L-category vehicles</u> must be battery electric.</p> <p><u>HDVs</u> The fleet must be composed of the following share of vehicles equipped with one of the eligible technologies listed among the core TS1</p>

¹ Directive (EU) 2019/1161 of the European Parliament and of the Council of 20 June 2019 amending Directive 2009/33/EC on the promotion of clean and energy-efficient road transport vehicles (<https://eur-lex.europa.eu/eli/dir/2019/1161/oj>)

<p>TS1 Technological improvement options to reduce GHG emissions of category 3</p> <ul style="list-style-type: none"> • 1.25 x share of the public purchase set by revised CVD for the country. <p>Verification: The tenderer must present the list of vehicles of the service fleet and their CO₂ emissions type approval (supported by certificates of conformity).</p>	<p>Technological improvement options to reduce GHG emissions of category 3</p> <ul style="list-style-type: none"> • 1.5 x share of the public purchase set by revised CVD for the country. <p>Verification: The tenderer must present the list of vehicles of the service fleet and their CO₂ emissions type approval (supported by certificates of conformity).</p>
<p>TS2. Air pollutant emissions TS2.1 Until December 2024: All HDVs used in carrying out the service must meet at least Euro V standard, and:</p> <ul style="list-style-type: none"> • 2021: 64% of HDVs must meet Euro VI. • 2022: 72% of HDVs must meet Euro VI. • 2023: 80% of HDVs must meet Euro VI. • 2024: 88% of HDVs must meet Euro VI. <p>The tier applicable will correspond to the year in which the call for tender is launched.</p> <p>From January 2025: All HDVs used in carrying out the service must meet at least Euro VI standard. Where vehicles are not certified as meeting Euro V or higher, but technical after-treatment has achieved the same standard, this should be documented in the tender. Until December 2026, all cars and LCVs used in carrying out the</p>	<p>TS2. Air pollutant emissions TS2.1 Until December 2022: All HDVs used in carrying out the service must meet at least Euro V standard, and:</p> <ul style="list-style-type: none"> • 2021: 84% of HDVs must meet Euro VI. • 2022: 92% of HDVs must meet Euro VI. <p>The tier applicable will correspond to the year in which the call for tender is launched.</p> <p>From January 2023: All HDVs used in carrying out the service must meet at least Euro VI standard. Where vehicles are not certified as meeting Euro V or higher, but technical after-treatment has achieved the same standard, this should be documented in the tender. Until December 2025, all cars and LCVs used in carrying out the service must meet at least Euro 6c, and:</p>

<p>service must meet at least Euro 6c, and:</p> <p>2021: 15% of cars and LCVs must meet the Euro 6d-TEMP, Euro 6d standard or later standard.</p> <p>2022: 30% of cars and LCVs must meet the Euro 6d-TEMP, Euro 6d standard or later standard.</p> <p>2023: 45% of cars and LCVs must meet the Euro 6d-TEMP, Euro 6d standard or later standard.</p> <p>2024: 60% of cars and LCVs must meet the Euro 6d-TEMP, Euro 6d standard or later standard.</p> <p>2025: 75% of cars and LCVs must meet the Euro 6d-TEMP, Euro 6d standard or later standard.</p> <p>2026: 90% of cars and LCVs must meet the Euro 6d-TEMP, Euro 6d or later standard.</p> <p>From January 2027, all cars and LCVs used in carrying out the service must meet at least Euro 6d-TEMP or Euro 6d standard.</p> <p>All L-category vehicles used in carrying out the service must meet at least Euro 5.</p> <p><i>TS2.2. For urban areas with air quality issues:</i></p> <p>LCVs and L-category vehicles must have zero tailpipe emissions.</p> <p>If there is no charging infrastructure available, or if the expected use profile requires large ranges, vehicles may be only zero tailpipe emissions capable, meaning that an LCV can travel the minimum range of 50 km without emitting any tailpipe emissions.</p> <p>Verification: The tenderer must provide the vehicles' technical sheets with the emission standards are defined. For vehicles that have achieved the standard mentioned above following a technical upgrade, the measures must be documented and included in the tender, and this must be verified by an independent third party.</p>	<p>2021: 25% of cars and LCVs must meet the Euro 6d-TEMP, Euro 6d standard or later standard.</p> <p>2022: 40% of cars and LCVs must meet the Euro 6d-TEMP, Euro 6d standard or later standard.</p> <p>2023: 55% of cars and LCVs must meet the Euro 6d-TEMP, Euro 6d standard or later standard.</p> <p>2024: 70% of cars and LCVs must meet the Euro 6d-TEMP, Euro 6d standard or later standard.</p> <p>2025: 85% of cars and LCVs must meet the Euro 6d-TEMP, Euro 6d standard or later standard.</p> <p>From January 2026, all cars and LCVs used in carrying out the service must meet at least Euro 6d-TEMP, Euro 6d or later standard.</p> <p>All L-category vehicles used in carrying out the service must meet at least Euro 5.</p> <p><i>TS2.2. For urban areas with air quality issues:</i></p> <p>LCVs and L-category vehicles must have zero tailpipe emissions.</p> <p>If there is no charging infrastructure available, or if the expected use profile requires large ranges, the vehicles may be only zero tailpipe emissions capable, meaning that an LCV can travel the minimum range of 50 km without emitting any tailpipe emissions.</p> <p>Verification: The tenderer must provide the vehicles' technical sheets with the emission standards defined, and the partnership agreement with the urban consolidation centre where applicable.</p> <p>For vehicles that have achieved the standard mentioned above following a technical upgrade, the measures must be documented and included in the tender, and this must be verified by an independent third party.</p>
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AWARD CRITERIA

AC1. CO₂ emissions

(same for core and comprehensive)

Note: the contracting authority sets out in the call for tender what types of vehicles are required to provide the service.

For cars and LCVs

Points will be awarded to tenders offering a service fleet whose share of TS1-compliant vehicles is above the share set by TS1 proportionally to the share of the fleet compliant with TS1.

For buses

Points will be awarded to tenders offering a service fleet composed of a certain number of vehicles equipped with one of the eligible technologies mentioned in the core TS1 of category 3. The contracting authority may set this number as: (i) a percentage, (i) all the vehicles of the fleet, (iii) specific vehicle categories or sub-categories, or (iv) vehicles to be used on specific routes. See the explanatory note for more details.

Verification: the tenderer must present a spreadsheet with a list of vehicles of the service fleet, their CO₂ emissions type approval (supported by certificates of conformity), and/or, for buses, the vehicle's technical sheet where these technologies are listed.

AC2. Air pollutant emissions

(same for core and comprehensive, not applicable if zero tailpipe emissions are required for all vehicles under technical specification TS2.2)

Points will be awarded to tenders offering either:

- (a). a higher percentage than the one set by the TS2,
- (b). cars and vans that have an emission performance better than Euro 6 standard,
- (c). L-category vehicles that have an emission performance better than Euro 5, or
- (d). natural gas buses and zero-emission capable vehicles, i.e. cars and LCVs able to drive a minimum range of 50 km without emitting any tailpipe emissions, plug-in hybrid electric vehicles (PHEV), battery electric vehicles (BEV) for buses and L-category vehicles, and fuel cell electric vehicles (FCEV) for buses.

(The contracting authority will detail the extent to which points will be attributed based on higher percentages, better performance and zero tailpipe vehicles. Zero tailpipe vehicles must be given more points than vehicles with a performance better than Euro 6/5 standard and natural gas buses).

Verification:

See TS2 above

5.3 Explanatory notes

Explanatory notes

Combined mobility services

Combined mobility services (CMS) offer a wide range of combined mobility options that usually include public transport and renting bicycles. A key feature of CMS is the capacity to meet the travel demands of customers using the most appropriate and efficient transport mode, or combination of modes. The mobility solutions are optimised to reduce the ratio energy consumed per distance and passenger (energy/[km.passenger]); this is achieved by prioritising non-motorised vehicles and public transport modes. Therefore, the level of multi- and inter-modality is a crucial element in meeting travel needs in the most efficient way. The level of multi- and inter-modality of the mobility service could be defined as the different types of transport modes that the service is able to offer, and combinations possible in one trip. Transport modes are understood to mean: private cars, L-category vehicles, electric bikes, bikes, public transport, car sharing, etc. The combined mobility services are still at a very early stage of development. However, the potential of this type of service to stimulate the modal shift towards non-motorised and public transport services is very significant. It is therefore recommended that public procurers explore the possibility of procuring combined mobility services instead of other mobility services that do not offer inter-modality, if there are operators available.

6 EU GPP CRITERIA FOR THE PURCHASE OR LEASE OF HEAVY-DUTY VEHICLES (CATEGORY 3)

6.1 Subject matter

SUBJECT MATTER
Purchase or lease of heavy-duty vehicles defined as M2, M3, N2 and N3 vehicles by Regulation (EU) 2018/858, i.e. buses and trucks, including waste collection vehicles, with low environmental impact.

6.2 Technical specifications and award criteria

Important: Common criteria for vehicle categories (Section 9) also apply to this category

Core criteria	Comprehensive criteria
TECHNICAL SPECIFICATION	
<p>TS1 Technological improvement options to reduce GHG emissions The vehicles must be equipped with one of the following technologies:</p> <ul style="list-style-type: none"> • OEM dual-fuel natural gas vehicle with a gas energy ratio over the hot part of the world harmonized transient cycle (WHTC) test-cycle of at least 50% * • high-pressure direct injection natural gas vehicles * • dedicated natural gas vehicles * • full electric vehicles • plug-in hybrid vehicle** • hydrogen fuel cell vehicle * <p><i>* Hydrogen and natural gas vehicles require a minimum percentage of renewable fuel supply to be eligible (see note below).</i></p> <p><i>** Currently, plug-in hybrid technology is not being used for inter-city buses and coaches, and although its future use cannot be discarded, there is not a clear usage pattern visible at the moment.</i></p>	<p>TS1 Technological improvement options to reduce GHG emissions The vehicles must be equipped with one of the following technologies:</p> <ul style="list-style-type: none"> • full electric • hydrogen fuel cell vehicle * <p><i>* Hydrogen vehicles require a minimum percentage of renewable fuel supply to be eligible (see note below).</i></p>

<p>Verification:</p> <p>The tenderer must present the vehicle's technical sheet where these technologies are stated.</p>	
<p>TS2. Air pollutant emissions performance</p> <p>Vehicles with a reference mass¹ exceeding 2 610 kg must meet Euro VI standard, according to Regulation (EC) No 595/2009 of the European Parliament².</p> <p>Vehicles with a reference mass¹ not exceeding 2 610 kg must comply with the TS2 air pollutant emission performance levels of Category 1.</p> <p>Verification:</p> <p>The tenderer must present the vehicle's certificate of conformity. For vehicles that have achieved the standard mentioned above following a technical upgrade, the measures must be documented and included in the tender, and this must be must be verified by an independent third party.</p>	<p>TS2. Air pollutant emissions performance</p> <p>Vehicles with a reference mass¹ exceeding 2 610 kg must be zero-emission vehicles, meaning vehicles without an internal combustion engine, or with an internal combustion engine that emits less than 1 g CO₂/kWh as measured in accordance with Regulation (EC) No 595/2009 of the European Parliament, or</p> <p>Vehicles with a reference mass¹ not exceeding 2 610 kg must comply with the TS2 air pollutant emission performance levels of Category 1.</p> <p>Verification:</p> <p>The tenderer must present the vehicle's certificate of conformity. For vehicles that have achieved the standard mentioned above following a technical upgrade, the measures must be documented and included in the tender, and this must be must be verified by an independent third party.</p>
<p>TS3. Auxiliary units (same for core and comprehensive)</p> <p><i>Note: this criterion applies to waste collection vehicles</i></p> <p>The vehicle's emissions from the separate engines for auxiliary units (e.g. compactor, lifter, etc., to be defined by the contracting authority) must meet the exhaust emission limits under Regulation (EU) No 2016/1628³, Stage V.</p>	

² Regulation (EC) No 595/2009 of the European Parliament and of the Council of 18 June 2009 on type-approval of motor vehicles and engines with respect to emissions from heavy duty vehicles (Euro VI) and on access to vehicle repair and maintenance information and amending Regulation (EC) No 715/2007 and Directive 2007/46/EC and repealing Directives 80/1269/EEC, 2005/55/EC and 2005/78/EC. <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32009R0595>

Verification: The tenderer must present either a type approval certificate or a test report from an independent laboratory, under Regulation (EU) No 2016/1628.	
TS4. Exhaust pipes (location) (same for core and comprehensive) Bus exhaust pipes must be located either on the opposite side of the passenger door at the rear of the vehicle or on the roof. Verification: The tenderer must provide the vehicle's technical sheet of the vehicle.	
AWARD CRITERIA	
AC1. Technological improvement options to reduce GHG emissions Points will be awarded to vehicles equipped with one of the following technologies: <ul style="list-style-type: none"> • full electric vehicle • hydrogen fuel cell vehicle Verification: same as TS1.	
	AC2. Air conditioning gases Points will be awarded to vehicles equipped with an air conditioning system that uses a refrigerant whose global warming potential (GWP), as a factor of CO ₂ and over a time horizon of 100 years, is below 150. Verification: The tenderer must provide the name, formula and GWP of the

³ Regulation (EU) 2016/1628 of the European Parliament and of the Council of 14 September 2016 on requirements relating to gaseous and particulate pollutant emission limits and type-approval for internal combustion engines for non-road mobile machinery, amending Regulations (EU) No 1024/2012 and (EU) No 167/2013, and amending and repealing Directive 97/68/EC. <https://eur-lex.europa.eu/eli/reg/2016/1628/oj>

	<p>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:</p> $\text{GWP} = \Sigma(\text{Substance } X1 \% \times \text{GWP}(X1)) + (\text{Substance } X2 \% \times \text{GWP}(X2)) + \dots$ $(\text{Substance } Xn \% \times \text{GWP}(Xn))$ <p>where % is the contribution by weight with a weight tolerance of +/- 1 %.</p> <p>GWP of gases can be found in Annexes I and II of Regulation (EU) No 517/2014 http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2014.150.01.0195.01.ENG)</p>
<p>AC3. Improved air pollutant emissions performance</p> <p>Points will be awarded to zero-emission vehicles, meaning a vehicle without an internal combustion engine, or with an internal combustion engine that emits less than 1 g CO₂/kWh as measured in accordance with Regulation (EC) No 595/2009 of the European Parliament</p> <p>Verification:</p> <p>The tenderer must provide the vehicle's certificate of conformity. For those vehicles having achieved the abovementioned 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.</p>	
	<p>AC4. Electrification of auxiliary engines</p> <p>Points will be awarded to vehicles equipped with electric auxiliary units.</p> <p>Verification:</p> <p>The tenderer must present the vehicle's technical where this information is stated.</p>

6.3 Explanatory notes

Explanatory notes

TS1 Technological improvement options to reduce GHG emissions

Qualification of technologies

The contracting authorities may decide that fuel-cell electric vehicles qualify as an eligible technology if they have a supply of hydrogen produced with renewable sources generated on-site, meeting at least 15% of their demand.

The contracting authorities may decide that an OEM dual-fuel natural-gas vehicle qualifies as an eligible technology, if they have a supply of renewable methane meeting at least 60% of their demand.

The contracting authorities may decide that high-pressure direct-injection natural-gas vehicles qualify as an eligible technology, if they have a supply of renewable methane meeting at least 20% of their demand.

The contracting authorities may decide that dedicated natural-gas vehicles qualify as an eligible technology, if they have a supply of renewable methane meeting at least 35% of their demand.

Renewable methane is biomethane and synthetic methane produced with a surplus of renewable electricity, meaning the renewable electricity production that exceeds demand during certain periods and creates a surplus production of electricity (power-to-gas).

TS2. Air pollutant emissions

¹ 'Reference mass' means the mass of the vehicle in running order, as declared in the certificate of conformity, minus the standard 75 kg mass of the driver, plus a standard mass of 100 kg.

Information on setting the battery warranty terms for battery electric vehicles

(if the contracting authority requires battery electric vehicles)

According to the ZeEUS eBus report 'An updated overview of electric buses in Europe', the suppliers of LiFePO₄ batteries usually offer warranty periods ranging from 2 to 5 years, 4-5 years being the most frequent period. There is less data on lithium nickel manganese cobalt oxide (LiNiMnCoO₂ or NMC) batteries, which range from 2 to 6 years. Lithium titanate batteries show higher warranty periods, up to 15 years, and graphene ultracapacitors from 8 to 11 years. Other suppliers offer tailored warranties depending on the leasing contract, which may include performance monitoring over an agreed timeframe.

Further details can be found in the ZeEUS eBus report 'An overview of electric buses in Europe': <http://zeeus.eu/uploads/publications/documents/zeeus-ebus-report-internet.pdf>

The technology of electric vehicles is evolving very quickly towards more durable and reliable batteries. For this reason, the public authority should

*look at the latest available information on what the market can deliver when formulating the call for tenders.
Contracting authorities could also reward longer warranty periods via an award criterion.*

7 EU GPP CRITERIA FOR THE OUTSOURCING OF ROAD TRANSPORT SERVICES (CATEGORY 4)

7.1 Subject matter

SUBJECT MATTER
<p>Outsourcing of the following road transport services for which contracting authorities are responsible:</p> <ul style="list-style-type: none"> • ‘bus services’ or ‘public transport services’: these should be defined as those covered by Regulation (EC) No 1370/2007 and/or CPV codes 60112000-6 (public road transport services); • ‘waste collection services’: these should be defined as those covered by CPV categories of ‘refuse collection services’ (90511000-2) and ‘refuse transport services’ (90512000-9); • ‘post and courier services’: these should be defined as those covered by CPV categories of Group 641 ‘post and courier services’, with the exception of rail, airmail and mail transport over water.

7.2 Technical specifications and award criteria

(these criteria apply only if the operators own or lease the service fleet)

Important: common criteria for service categories (Section 10) also apply to this category

Core criteria	Comprehensive criteria
TECHNICAL SPECIFICATION	
<p>TS1. Technological options to reduce GHG emissions Option 1 The fleet must be composed of the following shares of vehicles equipped with one of the eligible technologies listed among the core TS1 technological improvement options to reduce GHG emissions of category 3 or compliant with TS1 type approval CO₂ emissions of category 1: 1.25 x share of the public procurement set in the revised CVD for the country</p>	<p>TS1. Technological options to reduce GHG emissions Option 1 For post services and waste collection services, the fleet must be composed of the following shares of vehicles equipped with one of the eligible technologies listed among the core TS1 technological improvement options to reduce GHG emissions of Category 3 or compliant with TS1 type approval CO₂ emissions of Category 1: 1.5 x share of the public procurement set by the revised CVD for the country</p>

<p>Option 2</p> <p>The service network must be operated, totally or partially, using vehicles that comply with specifications in the following ways:</p> <ul style="list-style-type: none"> - HDVs must be equipped with one of the eligible technologies listed among the TS1 technological improvement options to reduce GHG emissions of category 3. <p><i>The contracting authority may set the technology/technologies that are eligible as one of the core TS1 technological improvement options to reduce GHG emissions of category 3 or leave this choice up to the tenderer.</i></p> <p><i>The contracting authority may also decide if some specific routes must be covered with specific technology/technologies.</i></p> <ul style="list-style-type: none"> - cars and LDVs must be compliant with core TS1 type approval CO₂ emissions. <p>Verification:</p> <p>Same as for TS1 technological improvement options to reduce GHG emissions of category 3, together with a list and technical sheets of the whole fleet.</p>	<p>For bus services, the fleet must be composed of the following shares of vehicles equipped with one of the zero-emission technologies listed among the comprehensive TS1 technological improvement options to reduce GHG emissions of category 3:</p> <p>1.5 x share of zero-emission buses in public procurement set in the revised CVD for the country</p> <p>Option 2</p> <p>The service network must be operated, totally or partially, using vehicles that comply with specifications in the following ways:</p> <ul style="list-style-type: none"> - HDVs must be equipped with one of the eligible technologies listed among the TS1 technological improvement options to reduce GHG emissions of category 3. <p><i>The contracting authority may set the technology/technologies that are eligible as one of the core TS1 technological improvement options to reduce GHG emissions of category 3 or leave this choice up to the tenderer.</i></p> <p><i>The contracting authority may also decide if some specific routes must be covered with specific technology/technologies.</i></p> <ul style="list-style-type: none"> - cars and LDVs must be compliant with comprehensive TS1 type approval CO₂ emissions. <p>Verification:</p> <p>Same as for TS1 technological improvement options to reduce GHG emissions of category 3, together with a list and technical sheets of the whole fleet.</p>
<p>TS2. Cyclelogistics (same for core and comprehensive)</p> <p><i>Note: this technical specification will apply to vehicles used in urban post and courier deliveries. Contracting authorities could also prescribe the kind of deliveries for which cyclelogistics have to be used (in cities where the urban infrastructure is suitable and there are sufficient cyclelogistics</i></p>	

operators).

The tenderer must offer a service fleet that includes cycles and cycle trailers, which may be electrically power assisted cycles. This aims to minimise the use of motorised vehicles and address last mile issues, based on the emissions reduction plan set by the TS1 environmental management practices in the common criteria for service categories.

This criterion may be fulfilled by means of a partnership with an urban consolidation centre whose fleet is composed of bikes and cargo bikes.

Verification: The tenderer will present the specifications of the service fleet, and where applicable the partnership agreement with an urban consolidation centre

TS2. Tyre pressure monitoring systems (TPMS)

(same for core and comprehensive)

All vehicles must be equipped with systems compliant with TS1 as regards TPMS, as defined in Section 9.2 of the common criteria for vehicle categories.

Verification:

Same as for TS1 on TPMS in Section 10.2 of the common criteria for vehicle categories, together with a list and technical sheets of the whole fleet.

TS3. Vehicle tyres – rolling resistance

(same for core and comprehensive)

All vehicles must be equipped with tyres compliant with TS2 as regards vehicle tyres, as defined in Section 9.2 of the common criteria for vehicle categories.

Verification:

Same as for TS2 on vehicle tyres in Section 10.2 of the common criteria for vehicle categories, together with a list and technical sheets of the whole fleet.

TS4. Fuels

(same for core and comprehensive)

Note: this criterion applies only if the contracting authority decides that a technology is eligible according to the note of the TS1 technological improvement options to reduce GHG emissions of category 3 (Section 6.2) and if the tenderer includes that technology to comply with TS1. The contracting authority may set higher percentages of renewable fuel supply according to the available supply in their national or regional market.

The share of renewable fuel supply must comply with the percentages set in the note of the TS1 technological improvement options to reduce GHG emissions of category 3 (Section 6.2).

Verification: The tenderer must provide a copy of the contract(s) that has (have) been signed with the supplier(s) and the description and technical specifications of the production and dedicated fuel supply system.	
TS5. Air pollutant emissions TS5.1. Until December 2024: All HDVs used in carrying out the service must meet at least Euro V standard, and: <ul style="list-style-type: none"> • 2021: 64% of HDVs must meet Euro VI. • 2022: 72% of HDVs must meet Euro VI. • 2023: 80% of HDVs must meet Euro VI. • 2024: 88% of HDVs must meet Euro VI. The tier applicable will correspond to the year in which the call for tender is launched. From January 2025: All HDVs used in carrying out the service must meet at least Euro VI standard. Where vehicles are not certified as meeting Euro V or higher, but have achieved the same standard following technical after-treatment, this should be documented in the tender. Until December 2026, all LCVs used in carrying out the service must meet at least Euro 6c standard, and: <ul style="list-style-type: none"> • 2021: 15% of cars and LCVs must meet the Euro 6d-TEMP, or Euro 6d standard or later standard. • 2022: 30% of cars and LCVs must meet the Euro 6d-TEMP, Euro 6d standard or later standard. • 2023: 45% of cars and LCVs must meet the Euro 6d-TEMP, or 	TS5. Air pollutant emissions TS5.1. Until December 2022: All HDVs used in carrying out the service must meet at least Euro V standard, and: <ul style="list-style-type: none"> • 2021: 84% of HDVs must meet Euro VI. • 2022: 92% of HDVs must meet Euro VI. The tier applicable will correspond to the year in which the call for tender is launched. From January 2023: All HDVs used in carrying out the service must meet at least Euro VI standard. Where vehicles are not certified as meeting Euro V or higher, but have achieved the same standard following technical after-treatment, this should be documented in the tender. Until December 2025, all LCVs used in carrying out the service must meet at least Euro 6c standard, and: <ul style="list-style-type: none"> • 2021: 25% of cars and LCVs must meet the Euro 6d-TEMP, or Euro 6d standard or later standard. • 2022: 40% of cars and LCVs must meet the Euro 6d-TEMP, or Euro 6d standard or later standard. • 2023: 55% of cars and LCV must meet the Euro 6d-TEMP, or Euro 6d standard or later standard. • 2024: 70% of cars and LCVs must meet the Euro 6d-TEMP, or

<p>Euro 6d standard or later standard.</p> <ul style="list-style-type: none"> • 2024: 60% of cars and LCVs must meet the Euro 6d-TEMP, or Euro 6d standard or later standard. • 2025: 75% of cars and LCVs must meet the Euro 6d-TEMP, or Euro 6d standard or later standard. • 2026: 90% of cars and LCVs must meet the Euro 6d-TEMP, or Euro 6d standard or later standard. <p>From January 2027, all LCVs used in carrying out the service must meet at least Euro 6d-TEMP or Euro 6d standard.</p> <p>All L-category vehicles used in carrying out the service must meet at least Euro 5.</p> <p><i>TS5.2. For urban areas with air quality issues:</i></p> <p>LCVs and L-category vehicles must have zero tailpipe emissions.</p> <p>If there is no charging infrastructure available or if the expected use profile requires large ranges, the vehicles must at the very least be zero tailpipe emissions capable, meaning that they can travel the minimum range of 50 km without emitting any tailpipe emissions.</p> <p>Verification: The tenderer must provide the vehicles' technical sheets with emission standards defined. For vehicles that have achieved the standard mentioned above following a technical upgrade, the measures must be documented and included in the tender, and this must be verified by an independent third party.</p>	<p>Euro 6d standard or later standard.</p> <ul style="list-style-type: none"> • 2025: 85% of cars and LCVs must meet the Euro 6d-TEMP, or Euro 6d standard or later standard. <p>From January 2026, all cars and LCVs used in carrying out the service must meet at least Euro 6d-TEMP, Euro 6d standard or later standard.</p> <p>All L-category vehicles used in carrying out the service must meet at least Euro 5.</p> <p><i>TS5.2. For urban areas with air quality issues:</i></p> <p>LCVs and L-category vehicles must have zero tailpipe emissions.</p> <p>If there is no charging infrastructure available or if the expected use profile requires large ranges, the vehicles must at the very least be zero tailpipe emissions capable, meaning that they can travel the minimum range of 50 km without emitting any tailpipe emissions.</p> <p>Verification: The tenderer must provide the vehicles' technical sheets with emission standards defined, and where applicable must include the partnership agreement with an urban consolidation centre.</p> <p>For vehicles that have achieved the standard mentioned above following a technical upgrade, the measures must be documented and included in the tender, and this must be verified by an independent third party.</p>
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AWARD CRITERIA

AC1. Technological options to reduce GHG emissions

(same for core and comprehensive)

Points will be awarded to tenders that offer:

Option 1: *(if applicable)* fleet to be used under the contract has a proportion of vehicles (%) larger than TS1 (see above), in proportion to the excess over the TS1 (see above).

Option 2: *(if applicable)* more routes than the ones set by the TS1 (see above) will be operated with vehicles compliant with core TS1 of category 3.

Verification:

See above TS1

AC2. Air pollutant emissions

(same for core and comprehensive, not applicable if zero tailpipe emissions required for all vehicles in technical specification TS5.2)

Points will be awarded to tenders offering either:

- (a). a higher percentage than the one set by TS5 (see above),
- (b). cars and vans that have an emission performance better than Euro 6 standard,
- (c). L-category vehicles that have an emission performance better than Euro 5, or
- (d). natural gas buses and zero-emission capable vehicles, i.e. cars and LCVs able to drive a minimum range of 50 km without emitting any tailpipe emissions, plug-in hybrid electric vehicles (PHEV), battery electric vehicles (BEV) for buses and L-category vehicles, and fuel cell electric vehicles (FCEV) for buses.

(The contracting authority will detail the extent to which points will be attributed based on higher percentages, better performance and zero tailpipe vehicles. Zero tailpipe emission capable vehicles must be given more points than vehicles with a performance better than Euro 6/5 standard and natural gas HDVs).

Verification:

See TS5 above

<p>AC3. Auxiliary units (same for core and comprehensive)</p> <p><i>Note: this award criterion applies to waste collection services.</i></p> <p>Points will be awarded based on the proportion of vehicles that comply with the TS3 auxiliary units of category 3.</p> <p>Verification: See TS3 of category 3</p>	
	<p>AC4. Noise emissions</p> <p>Points will be awarded to tenders that offer a service fleet totally composed of vehicles compliant with the AC1 on vehicle noise emissions set in Section 9.2 of the common criteria for vehicle categories.</p> <p>Verification: The tenderer must present a list of vehicles in the service fleet and their certificates of conformity.</p>

7.3 Contract performance clauses

(this only applies if the operators own or lease the service fleet)

Core criteria	Comprehensive criteria
CONTRACT PERFORMANCE CLAUSES	
CPC1. New vehicles (same for core and comprehensive) If a vehicle in the service fleet is replaced, the new vehicle must contribute to maintaining or improving the fleet's features (composition and technologies used) in terms of GHG emissions and air pollutant emissions as offered in the tender. The contractor will keep records of any changes to the service fleet and must make them available to the contracting authority for verification purposes. The contracting authority may set rules for applying penalties for non-compliance.	

7.4 Explanatory notes

Explanatory notes
Route optimisation for waste collection services <i>There are route optimisation systems that incorporate computerised vehicle routing and scheduling (CVRS) technology and are able to reduce fuel consumption by 5 % to 15 %. These systems may use:</i> <ul style="list-style-type: none"><i>(a). models that predict the level of filling of bins, based on data from pay-as-you-throw systems or by means of weight systems installed in the trucks,</i><i>(b). sensors set inside the bins that monitor real-time data of the level of filling of bins.</i> <i>Both technologies are currently mature and available on the market. Therefore, it is recommended that the contracting authority explores the possibilities for implementing these route optimisation systems within their waste collection systems.</i>

8 EU GPP CRITERIA FOR THE PURCHASE OF POST, COURIER AND MOVING SERVICES (CATEGORY 5)

8.1 Subject matter

SUBJECT MATTER
<p>Procurement (not outsourcing) of post, courier and moving services with low environmental impact, which comprise:</p> <ul style="list-style-type: none"> - Group 641 Post and courier services, with the exception of rail, airmail and mail transport over water, - 79613000-4 Employee relocation services, - 63100000-0 Cargo handling and storage services, - 98392000-7 Relocation services.

8.2 Technical specifications and award criteria

(these criteria apply only if the operators own or lease the service fleet)

Important: common criteria for service categories (Section 9) also apply to this category

Core criteria	Comprehensive criteria
TECHNICAL SPECIFICATION	
<p>TS1. Type-approval CO₂ value <u>Cars and vans</u> The fleet must be composed of vehicles that do not exceed the following type-approval CO₂ value:</p> <ul style="list-style-type: none"> • Until 31 December 2025: 50 (WLTP) • From 1 January 2026: 0 <p>In the following shares:</p> <ul style="list-style-type: none"> • 1.25 x share of the public procurement set in the revised CVD for the country. 	<p>TS1. Type-approval CO₂ value <u>Cars and vans</u> The fleet must be composed of vehicles that do not exceed 0 g/km, in the following shares:</p> <ul style="list-style-type: none"> • 1.5 x share of the public procurement set in the revised CVD for the country. <p>L-category vehicles must be battery-electric.</p> <p><u>HDVs</u> The fleet must be composed of the following share of vehicles equipped with one of the eligible technologies listed among the core TS1</p>

<p><u>L-category vehicles</u> must be battery electric.</p> <p><u>HDVs</u></p> <p>The fleet must be composed of the following share of vehicles equipped with one of the eligible technologies listed among the core TS1 Technological improvement options to reduce GHG emissions of category 3</p> <p>1.25 x share of the public purchase set by revised CVD for the country.</p> <p>This criterion may be fulfilled by means of a partnership with an urban consolidation centre whose fleet complies with the technical specification.</p> <p>Verification:</p> <p>The tenderer must present a list of vehicles in the service fleet and their CO₂ emissions type approval (supported by certificates of conformity).</p>	<p>Technological improvement options to reduce GHG emissions of category 3</p> <p>1.5 x share of the public purchase set by revised CVD for the country.</p> <p>This criterion may be fulfilled by means of a partnership with an urban consolidation centre whose fleet complies with the technical specification.</p> <p>Verification:</p> <p>The tenderer must present a list of vehicles in the service fleet and their CO₂ emissions type approval (supported by certificates of conformity).</p>
<p>TS2. Cyclelogistics (same for core and comprehensive)</p> <p><i>Note: this technical specification applies to vehicles used in urban post and courier deliveries. Contracting authorities could also prescribe the kinds of deliveries for which cyclelogistics have to be used (in cities where the urban infrastructure is suitable and where there are sufficient cyclelogistics operators).</i></p> <p>The tenderer must offer a service fleet that includes cycles and cycle trailers, which may be electrically power assisted cycles. This aims to minimise the use of motorised vehicles and address last mile issues, based on the emissions reduction plan set by the TS1 environmental management practices in the common criteria for service categories (Section 10.2).</p> <p>This criterion may be fulfilled by means of a partnership with an urban consolidation centre whose fleet is composed of bikes and cargo bikes.</p> <p>Verification: The tenderer will present the specifications of the service fleet, and where applicable a partnership agreement with the urban consolidation centre.</p>	

<p>TS3. Air pollutant emissions</p> <p>TS3.1</p> <p>Until December 2024:</p> <p>All HDVs used in carrying out the service must meet at least Euro V standard, and:</p> <ul style="list-style-type: none"> • 2021: 64% of HDVs must meet Euro VI. • 2022: 72% of HDVs must meet Euro VI. • 2023: 80% of HDVs must meet Euro VI. • 2024: 88% of HDVs must meet Euro VI. <p>The tier applicable will correspond to the year in which the call for tender is launched.</p> <p>From January 2025:</p> <p>All HDVs used in carrying out the service must meet at least Euro VI standard.</p> <p>Where vehicles are not certified as meeting Euro V or higher, but have achieved the same standard following technical after-treatment, this should be documented in the tender.</p> <p>Until December 2026, all cars and LCVs used in carrying out the service must meet at least Euro 6c standard, and:</p> <ul style="list-style-type: none"> • 2021: 15% of cars and LCVs must meet the Euro 6d-TEMP, or Euro 6d standard or later standard. • 2022: 30% of cars and LCVs must meet the Euro 6d-TEMP, Euro 6d standard or later standard. • 2023: 45% of cars and LCVs must meet the Euro 6d-TEMP, or Euro 6d standard or later standard. • 2024: 60% of cars and LCVs must meet the Euro 6d-TEMP, or Euro 6d standard or later standard. 	<p>TS3. Air pollutant emissions</p> <p>TS3.1</p> <p>Until December 2022 :</p> <p>All HDVs used in carrying out the service must meet at least Euro V standard, and:</p> <ul style="list-style-type: none"> • 2021: 84% of HDVs must meet Euro VI. • 2022: 92% of HDVs must meet Euro VI. <p>The tier applicable will correspond to the year in which the call for tender is launched.</p> <p>From January 2023:</p> <p>All HDVs used in carrying out the service must meet at least Euro VI standard.</p> <p>Where vehicles are not certified as meeting Euro V or higher, but have achieved the same standard following technical after-treatment, this should be documented in the tender.</p> <p>Until December 2025, all cars and LCVs used in carrying out the service must meet at least Euro 6c standard, and:</p> <ul style="list-style-type: none"> • 2021: 25% of cars and LCVs must meet the Euro 6d-TEMP, Euro 6d standard or later standard. • 2022: 40% of cars and LCVs must meet the Euro 6d-TEMP, Euro 6d standard or later standard. • 2023: 55% of cars and LCVs must meet the Euro 6d-TEMP, Euro 6d standard or later standard. • 2024: 70% of cars and LCVs must meet the Euro 6d-TEMP, Euro 6d standard or later standard. • 2025: 85% of cars and LCVs must meet the Euro 6d-TEMP,
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<ul style="list-style-type: none"> • 2025: 75% of cars and LCVs must meet the Euro 6d-TEMP, or Euro 6d standard or later standard. • 2026: 90% of cars and LCVs must meet the Euro 6d-TEMP, or Euro 6d standard or later standard. <p>From January 2027, all cars and LCVs used in carrying out the service must meet at least Euro 6d-TEMP or Euro 6d standard.</p> <p>All L-category vehicles used in carrying out the service must meet at least Euro 5.</p> <p><i>TS3.2. For urban areas with air quality issues:</i></p> <p>LCVs and L-category vehicles must have zero tailpipe emissions.</p> <p>If there is no charging infrastructure available or if the expected use profile requires large ranges, the vehicles must at the very least be zero tailpipe emissions capable, meaning that they can travel the minimum range of 50 km without emitting any tailpipe emissions.</p> <p>Verification: The tenderer must provide the vehicles' technical sheets with emission standards defined. For vehicles that have achieved the standard mentioned above following a technical upgrade, the measures must be documented and included in the tender, and this must be verified by an independent third party.</p>	<p>Euro 6d standard or later standard.</p> <p>From January 2026, all cars and LCVs used in carrying out the service must meet at least Euro 6d-TEMP, Euro 6d or later standard.</p> <p>All L-category vehicles used in carrying out the service must meet at least Euro 5.</p> <p><i>TS3.2. For urban areas with air quality issues:</i></p> <p>LCVs and L-category vehicles must have zero tailpipe emissions.</p> <p>If there is no charging infrastructure available or if the expected use profile requires large ranges, the vehicles must at the very least be zero tailpipe emissions capable, meaning that they can travel the minimum range of 50 km without emitting any tailpipe emissions.</p> <p>Verification: The tenderer must provide the vehicles' technical sheets with emission standards defined, and where applicable the partnership agreement with an urban consolidation centre.</p> <p>For vehicles that have achieved the standard mentioned above following a technical upgrade, the measures must be documented and included in the tender, and this must be verified by an independent third party.</p>
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AWARD CRITERIA

AC1. CO₂ emissions

(only applicable to LCVs and L-category vehicles; same for core and comprehensive)

Points will be awarded proportionally to the compliant share of the LCV fleet or to the share of vehicles equipped with eligible technologies for HDVs.

- For LCVs and L-Category vehicles, points will be awarded proportionally to the extent to which the share of the LCV fleet is higher than the share set by TS1.
- For HDVs, points will be awarded for the share of vehicles powered by the technologies listed in TS1 for category 3 (purchase and lease of

HDVs).

Verification: the tenderer must present a list of the vehicles in the service fleet and their CO₂ emissions type approval (supported by certificates of conformity).

AC2. Air pollutant emissions

(same for core and comprehensive, not applicable if zero tailpipe emissions are required for all vehicles in TS1.2.)

Points will be awarded to tenders offering either:

- (a). a higher percentage than the one set by TS3,
- (b). cars and vans that have an emission performance better than Euro 6,
- (c). L-category vehicles that have an emission performance better than Euro 5, or
- (d). natural gas buses and zero-emission capable vehicles, meaning cars and LCV able to drive a minimum range of 50 km without emitting any tailpipe emissions, and plug-in hybrid electric vehicles (PHEV), battery electric vehicles (BEV) for buses and L-category vehicles, and fuel cell electric vehicles (FCEV) for buses.

(The contracting authority will detail the extent to which points will be attributed based on higher percentages, better performance and zero tailpipe vehicles. Zero tailpipe emissions vehicles must be given more points than vehicles with a performance better than Euro 6/5 standard and natural gas buses).

Verification:

See above TS3

9 COMMON CRITERIA FOR VEHICLE CATEGORIES

9.1 Subject matter

SUBJECT MATTER

Purchase of the following road transport vehicles with low environmental impact:

- ‘cars, light commercial vehicles (LCVs) and L-category vehicles’;
- ‘heavy-duty vehicles’.

9.2 Technical specifications and award criteria

Core criteria	Comprehensive criteria
TECHNICAL SPECIFICATION	
<p>TS1. Tyre pressure monitoring systems (TPMS) (same for core and comprehensive)</p> <p>LCVs and heavy-duty vehicles must be equipped with tyre pressure monitoring systems, i.e. systems that can evaluate tyre pressure or variation of pressure over time and transmit the corresponding information to the user while the vehicle is running, or, in the case of buses and waste collection trucks, systems that transmit this information to the operator site.</p> <p>Verification: The tenderer must provide the vehicles technical sheet where this information is stated.</p>	
<p>TS2. Vehicle tyres — rolling resistance (same for core and comprehensive)</p> <p><i>The vehicles must be equipped with tyres covered by either case a) or b) below:</i></p> <p><i>a) Tyres</i></p> <p><i>1) that comply with the highest fuel energy efficiency class for rolling resistance as defined by Regulation (EU) 2020/740 of the European Parliament and of the Council of 25 May 2020 on the labelling of tyres with respect to fuel efficiency and other parameters⁴</i></p> <p><i>and</i></p> <p><i>2) that comply with either class 'A' or class 'B' for wet grip as defined by the same regulation and in coherence with its Article 11.2.</i></p> <p><i>OR</i></p> <p><i>b) Retreaded tyres</i></p> <p>Verification: <i>The tenderer must provide the tyre's label under Regulation (EU) 2020/740 for tyres under case a or the notice of approval under Regulations 108</i></p>	

⁴ Regulation (EU) 2020/740 of the European Parliament and of the Council of 25 May 2020 on the labelling of tyres with respect to fuel efficiency and other parameters, amending Regulation (EU) 2017/1369 and repealing Regulation (EC) No 1222/2009.

<i>(cars and vans) and 109 (heavy-duty vehicles) for retreaded tyres (case b).</i>	
<p>TS3. Vehicle-specific eco-driving information <i>(same for core and comprehensive)</i></p> <p>Vehicles must be equipped with information/instructions on eco driving. In the case of internal combustion engine vehicles, the user manual of the vehicle must include guidelines on early shifting, maintaining a steady speed at low revolutions per minute (RPM) and anticipating traffic flows. In the case of hybrid and electric vehicles, information on using regenerative braking to save energy must be provided. For plug-in hybrid electric vehicles and range extender electric vehicles, the information provided must include specific instructions on maximising the kilometres driven electrically. This information/instructions may be provided in the form of training sessions (if the public authority chooses this option, it needs to prescribe a minimum amount of hours of training to be provided).</p> <p>Verification: The tenderer must provide the vehicle's technical sheet where this information is stated or a description and contents of the prescribed training sessions.</p>	
	<p>TS4. Tyre noise</p> <p>The vehicles must be equipped with: (a) tyres whose external rolling noise emission levels are class 'A' as defined by Regulation (EU) 2020/740 of the European Parliament and of the Council of 25th May 2020 on the labelling of tyres with respect to fuel efficiency and other parameters, or (b) retreaded tyres.</p> <p>Verification: The tenderer must provide the tyre's label under Regulation (EU) 2020/740 for tyres under case a) or the notice of approval under Annex 1 of the UNECE Regulation 109 for retreaded tyres (case b).</p>

AWARD CRITERIA	
	<p>AC1. Vehicle noise</p> <p>Points will be awarded to vehicles whose noise emissions are compliant with the Phase 3 limits of Regulation (EU) No 540/2014. The noise emissions will be tested according to the procedure outlined in Annex II of Regulation (EU) No 540/2014.</p> <p>Verification:</p> <p>The tenderer must provide the vehicle's certificate of conformity.</p>

10 COMMON CRITERIA FOR SERVICE CATEGORIES

10.1 Subject matter and selection criteria

SUBJECT MATTER	
<p>Purchase of the following road transport services with low environmental impact:</p> <ul style="list-style-type: none">– ‘mobility services’,– ‘bus services’,– ‘waste collection services’,– ‘post, courier and moving services’.	
Core criteria	Comprehensive criteria
SELECTION CRITERIA	
<p>SC1. Competences of the tenderer (same for core and comprehensive)</p> <p>The tenderer must have relevant experience in each of the following areas:</p> <ul style="list-style-type: none">- identifying, evaluating and implementing the available technologies and measures to reduce well-to-wheels GHG emissions and air pollutant emissions,- applying procedures related to monitoring and reporting GHG emissions. <p>Verification: Evidence in the form of information and references related to relevant contracts (possibly of a similar size) which were carried out in the previous 5 years and included the above elements.</p>	

10.2 Technical specifications and award criteria

Core criteria	Comprehensive criteria
TECHNICAL SPECIFICATION	
<p>TS1. Environmental management measures (same for core and comprehensive)</p> <p>The tenderer must have written procedures to:</p> <ol style="list-style-type: none"> 1. monitor and record the GHG and air pollutant emissions of the service; the indicators used must be the emissions and energy consumption of the service both in total per year and per passenger/tonne/unit transported-kilometre or another unit that reflects the performance of the service; 2. implement an emissions reduction plan with measures aiming to reducing GHG emissions and air pollutant emissions; 3. evaluate the results of the emissions reduction plan by tracking any changes in the indicators, and the implementation of the measures set under the plan; 4. carry out the necessary actions to correct any deviations from the plan or any increase in the indicators, and if possible prevent them in the future. <p>Verification: The tenderer must provide:</p> <ol style="list-style-type: none"> 1. the procedure for monitoring and recording the indicators listed in TS1; 2. the emissions reduction plan; 3. the evaluation procedure to ensure implementation of the emissions reduction plan; 4. the correction procedure to correct any deviations found in the evaluation, and if possible prevent them in the future. <p>Environmental management systems certified against ISO 14001 or EMAS will be considered compliant if they cover the environmental objective of reducing GHG and air pollutant emissions of the service fleet. The tenderer must provide the environmental policy showing their commitment to achieving this objective, together with the certificate issued by the certification body.</p> <p><i>Note: the contracting authority may award points to tenders that offer significant improvements in their environmental management measures.</i></p>	

AWARD CRITERIA	
	<p>AC1 Lubricant oils, hydraulic fluids and grease</p> <p>Points will be awarded to tenders that include the use of the following in the maintenance of service vehicles:</p> <ul style="list-style-type: none"> - re-refined lubricant oils, i.e. oils derived from used oils that underwent a process that returns the oil to a quality suitable for its original use; - hydraulic fluids and greases that have no health or environmental hazard statement; the cumulative mass percentage of substances present in the hydraulic fluids and greases that are both nonbiodegradable and bioaccumulative must not be more than 0.1 % (w/w). <p>Verification: The tenderer must provide the technical sheets of lubricants and hydraulic fluids and greases used. Hydraulic fluids and greases that are compliant with the EU Ecolabel or equivalent type 1 ecolabel that includes the requirements set by AC1 will be considered compliant.</p>

10.3 Contract performance clauses

Core criteria	Comprehensive criteria
CONTRACT PERFORMANCE CLAUSES	
<p>CPC1. Driver training (same for core and comprehensive)</p> <p><i>Note: This contract performance clause will only apply if the service includes a driver and where drivers are not requested to have a driving certificate of professional competence (driver CPC) under Directive 2003/59/EC.</i></p> <p>All drivers involved in carrying out the service for the duration of the contract must be trained in a recognised institution on environmentally-</p>	

<p>conscious driving on a regular basis to increase fuel efficiency.</p> <p>Adequate training, with a minimum duration of 16 hours, must be provided to all new staff working under the contract within 4 weeks of starting employment, and an update on the above points, with a minimum duration of 4 hours, must be provided for all other staff at least once a year. The service provider must document and report yearly the amount (hours) and subject of training provided to each member of staff working on the contract to the contracting authority.</p> <p>All drivers involved in carrying out the service for the duration of the contract must regularly receive information on their fuel efficiency performance (at least once per month).</p> <p>The yearly staff training records must be made available to the contracting authority for verification purposes. The contracting authority may set rules for applying penalties for non-compliance.</p>
<p>CPC2. Environmental management measures (same for core and comprehensive)</p> <p>Over the contract's duration, the service provider must document and report the results of:</p> <ul style="list-style-type: none"> - the monitoring of indicators, and - the evaluation, correction and prevention actions taken, where applicable. <p>They must do so using the written procedures provided for verifying TS1 environmental management measures. These reports must be made available to the contracting authority for verification purposes. The contracting authority may set rules for applying penalties for non-compliance and bonuses for exceeding the objectives set by the emissions reduction plan.</p>
<p>CPC3. Low viscosity lubricant oils (same for core and comprehensive)</p> <p>Unless the vehicle's manufacturer recommends another type of lubricant, the contractor must replace the lubricants used on vehicles providing the service with low viscosity engine lubricant oils (LVLs). LVLs are lubricants that correspond to SAE grade number 0W30 or 5W30 or equivalent. The contractor will keep records of lubricants used and will make these available to the contracting authority.</p>
<p>CPC4. Vehicle tyres — rolling resistance (same for core and comprehensive)</p>

The vehicles must be equipped with tyres covered by either case a) or b) below:

a) tyres

- that are well adapted to the intended usage, climatic conditions and to their mounting position on vehicles of type N2, N3, O3 and O4, and
- that comply with the highest fuel energy efficiency class for rolling resistance as defined by Regulation (EU) 2020/740 of the European Parliament and of the Council of 25 May 2020 on the labelling of tyres with respect to fuel efficiency and other parameters and
- that comply with either class 'A' or class 'B' for wet grip as defined by the same regulation and in coherence with its Article 11.2;

OR

b) retreaded tyres

The contractor will keep records relating to tyres used and will make these available to the contracting authority.

CPC5. Tyre noise

The contractor must replace the worn tyres of vehicles providing the service with either:

- a) new tyres whose external rolling noise emission levels are class 'A' as defined by Regulation (EU) 2020/740 of the European Parliament and of the Council of 25th May 2020 on the labelling of tyres with respect to fuel efficiency and other parameters;

OR

- b) retreaded tyres.

The external rolling noise emissions of the tyre model must have been tested according to the procedure outlined in Annex I of Regulation (EU) 2020/740

	The contractor will keep records relating to the replacement of worn tyres and will make these available to the contracting authority.
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10.4 Explanatory notes

Explanatory notes
<p>CPC3. Low viscosity lubricant oils, CPC4. Vehicle tyres — rolling resistance and CPC5. Tyre noise</p> <p><i>The contracting authority may include these criteria within the call for tenders related to vehicle maintenance services. However, these criteria only cover a small part of the maintenance activities and cannot be considered as EU GPP criteria for vehicle maintenance services.</i></p> <p><i>The contracting authority may set rules for applying penalties for non-compliance with the various contract performance clauses.</i></p>
<p>CPC4. Vehicle tyres — rolling resistance</p> <p><i>Article 6 and Annex III of the Energy Efficiency Directive (2012/27/EU), which had to be transposed into national law by June 2014, set out specific obligations for contracting authorities to procure certain energy efficient equipment. This includes the obligation to purchase only those tyres that: 'comply with the criterion of having the highest fuel energy efficiency class, 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 must not prevent public bodies from purchasing tyres with the highest wet grip class or external rolling noise class where justified by safety or public health reasons'.</i></p> <p><i>This obligation is limited to central government and for purchases above the thresholds set out in the procurement directives. Moreover, the requirements have to be consistent with the principles of cost-effectiveness, economic feasibility, wider sustainability, technical suitability and sufficient competition. These factors can differ between contracting authorities and markets. For more guidance on the interpretation of this aspect of Article 6 and Annex III of the EED regarding procurement of energy-efficient products, services and buildings by central government authorities, see the Commission guidance document COM/2013/0762 final, Communication from the Commission to the European Parliament and the Council, Implementing the Energy Efficiency Directive – Commission Guidance¹⁾.</i></p> <p><i>Regulation (EC) No 1222/2009 has been replaced by Regulation (EU) 2020/740.</i></p> <p>¹⁾ http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex:52013DC0762</p>

Fleet composition requirements

Whenever a contracting authority requires a service provider to use a fleet with a certain percentage of the vehicles compliant with criteria on CO₂ emissions or air pollutant emissions, it should consider the best way to verify whether the criteria have been met. It can be cumbersome for the contractor to provide information and for the public authority to verify information about which vehicles were used for which distances on which day, and calculate the average. Therefore, if it is not considered feasible to ask for all vehicles to meet the requirement, the contracting authority could determine that on specific routes, only compliant vehicles can be used (e.g. in areas with air quality issues), or that one or several vehicle categories have to be compliant. These issues may be less relevant for the outsourcing of public bus services and waste collection services, where the planning and the monitoring of the services facilitate the verification of the fleet performance used to provide the services.

11 LIFE-CYCLE COSTING

Life-cycle cost (LCC) analysis is a method for assessing the total costs of the product group or service under study. It takes into account all costs related to the purchase, the use and maintenance operations and the disposal of any generated waste. The purpose of the LCC is to estimate the overall costs of project alternatives and to select the option that ensures the purchase or service, or both, that will provide the lowest overall costs consistent with quality and function. The LCC should be carried out early in the purchase process.

When evaluating offers, the LCC can help determine the lowest costs. In fact, the LCC can help authorities consider not only the acquisition costs of a product or service (e.g. raw material and manufacturing costs), but also other costs that usually have to be identified and calculated by the purchaser (e.g. maintenance costs, running costs, disposal and recycling costs, etc.). The LCC adds these kinds of costs to the selling price to have a comprehensive estimate of the cost of a product or service.

In addition, the LCC considers the environmental externalities of a product or service during its life-cycle, when it is possible to determine a monetary value for this. The use of the LCC can provide a more thorough view of the costs of a service through the stages of its life-cycle, including, for example not only the cost of supplies, accessories and machinery but also the cost of running the service (e.g. energy consumption during operations) and labour costs.

Directive 2014/24/EU on public procurement identifies the costs to be considered in an economic analysis of a purchase under consideration. For further information, please see the [technical report](#).

Contracting authorities can provide industry with real incentives for developing green technologies through green procurement. In some service sectors, the impact can be particularly significant, as public purchasers command a large share of the market (e.g. energy efficient buildings, public transport, facilities management). If the whole life costs of a contract are considered, green public procurement can save money while also having less impact on the environment. By purchasing wisely, one can save materials and energy, reduce waste and pollution, and encourage sustainable patterns of behaviour.

In the case of road transport, a life-cycle cost assessment has been carried out for different case studies, applying some of the EU GPP criteria:

- Case study 1: purchase of electric buses and other alternative technologies instead of diesel buses for a part of the vehicle fleet;
- Case study 2: training on eco-driving for drivers of a post and courier service.

The costs of the case scenarios were compared to a business-as-usual scenario without EU GPP criteria.

The following types of costs were estimated:

- a) total cost of ownership:
 - acquisition costs,
 - fuel costs,
 - maintenance costs,
 - insurance,
 - taxes.
- b) costs of externalities: emissions of carbon dioxide (CO₂) and of oxides of nitrogen (NO_x), non-methane hydrocarbons (NMHC) and particulate matter (PM), both covered by the Clean Vehicle Directive (Directive 2009/33/EC).

The life-cycle cost assessment carried out for these case studies makes the following conclusions (see the [technical report](#) for greater detail):

Case study 1: purchase of electric buses instead of diesel buses for a share of the vehicle fleet – the analysis shows that fuel taxes have a high impact on the LCC calculation. When taxes are taken into account in the LCC, the total cost of electric buses, including the cost of environmental externalities is at the same level, or lower, compared to diesel buses. The investment costs are relatively high in comparison to the rest of costs. Maintenance costs are expected to be lower for electric vehicles, because there are fewer moving parts in the engine, less wear-and-tear and fewer components that break down. However, as the technology behind electric buses is still developing, some technical failures can be expected. The cost of externalities, which include the emissions derived from the electricity production, is significantly reduced. Moreover, it is worth highlighting that the air pollutants released upstream by the power plants are usually emitted at considerable heights and often in sparsely populated areas. These emissions mix with large volumes of air and their contribution to air quality issues in urban areas is relatively small. Conversely, traffic emissions occur at low levels, in the ambient air layer, and they are the main source of pollution in urban areas. Since electric vehicles do not produce tailpipe emissions, they are able to improve the air quality of cities. Also, the GHG emissions and air pollution linked with electricity generation will go down further in the coming decades due to the decarbonisation of the EU electricity mix.

Case study 2: training on eco-driving for drivers of a post and courier service — the results show that the training is relatively expensive compared to the cost savings, due to the trainer fee and the loss in man-hours. For higher mileages, the criterion is more favourable, and as a bonus, it is also likely that drivers will improve their driving behaviour when they use their private cars.

11.1 Cost implications for some of the proposed criteria set

GPP criteria	Estimated impact on acquisition costs	Estimated impact on the life-cycle cost for the vehicle or service
Electric buses	<p>The investment cost for electric buses is 55% higher compared to diesel buses (IEA, 2018⁵ and BNEF, 2018⁶).</p> <p>The TNO and Civitas report 'Clean buses for your city' (TNO Civitas, 2013)⁷ estimated the infrastructure cost of opportunity charging as EUR 10 000 per bus, including charging points within the bus depots and along the routes at bus stops.</p>	<p>The vehicle's life-cycle cost is reduced by about 2.5 - 6 % if taxes are included, due to a reduction of energy costs and costs of environmental impacts. If taxes are excluded, electric buses do not attain life-cycle cost savings.</p>
Training on eco-driving for drivers of a post and courier service	<p>The estimated cost of the driving course is EUR 300 to EUR 1 000 per driver, including both the trainer fee and the loss in man-hours.</p>	<p>The life-cycle cost of the service is reduced by about 0.5 % and 2 % due to a reduction of fuel consumption and the cost of externalities if taxes are included.</p>

(See the [technical report](#) for greater detail)

⁵ IEA, 2018. *Global EV Outlook 2018* <https://www.iea.org/reports/global-ev-outlook-2018>

⁶ BNEF, 2018. *Electric Buses in cities* <https://about.bnef.com/blog/electric-buses-cities-driving-towards-cleaner-air-lower-co2/>

⁷ *Clean buses for your city* http://civitas.eu/sites/default/files/civ_pol-an_web.pdf