

First Stakeholder Questionnaire: Product definition, scope and criteria

January 2016

EU Green Public Procurement (GPP) for

STREET LIGHTING AND TRAFFIC SIGNALS

Revision of the current GPP criteria

**This questionnaire is intended to inform the ‘Revision of the EU Green Public Procurement (GPP) criteria for STREET LIGHTING AND TRAFFIC SIGNALS’**

Please email completed questionnaires to:

JRC-IPTS-STREETLIGHTING@ec.europa.eu no later than **22 February 2015**

*All information will be treated confidentially and will only be used as background information to help propose coherent and realistic procurement criteria. Please, feel free to forward this questionnaire to any person or organisation that may be interested in the revision of EU GPP criteria for Street Lighting and Traffic signals*.

# Guidance notes

This questionnaire is related to existing GPP criteria that can be downloaded from the EC website[[1]](#footnote-1) (including a technical background document) or from the project website, <http://susproc.jrc.ec.europa.eu/Street_lighting_and_Traffic_signs/documents.html>. The criteria document was also added to the mail that provided you with the questionnaire. It is important to know about those GPP criteria before answering this questionnaire.

Green Public Procurement (GPP) is a policy instrument designed to encourage the production and use of more environmentally friendly products and services through the certification and specification of products or services which have a reduced environmental footprint. The approach under GPP is to propose two types of criteria:

* **Core criteria**, which are those suitable for use by any contracting authority across the Member States and address the key environmental impacts. They are designed to be used with minimum additional verification effort or cost increases.
* **Comprehensive criteria**, which are for those who wish to purchase the best environmental friendly products available on the market. These may require additional verification effort or a slight increase in cost compared to other products with the same functionality.

In 2012, GPP Criteria for Street Lighting & Traffic Signals were published and this study will carry out a review of those criteria. For example the existing GPP criteria contain: technical specifications and award criteria for lighting components such as minimum efficacy and life time, limits for mercury content, criteria for lighting design, etc. So far LED luminaires were not included. This questionnaire follows the structure and content of the current GPP criteria and proposes new topics, including additional information requests about EU GPP criteria uptake, procurement approaches and economic data.

This questionnaire consists of four Sections (A, B, C and D):

**Section A:**

Company or Organisation details

**Section B:**

Views on proposals for scope and definitions

**Section C:**

C1 – C3, C5: Views on the current EU GPP criteria and proposed new criteria

C4: Feedback on the uptake of the current GPP criteria

**Section D:**

Updated market and stock data in order to increase the quality of the technical background document

Please, wherever appropriate, provide **reasoning for your response**.

|  |
| --- |
| Answer the following sub-sections: |
| **All stakeholders:** Sections **A, B, C1, C2****Only Suppliers**: Section **C3, D2****Only procurers/specifiers** or **road/traffic lighting specifiers**: Sections **C4, C5, D1**  |

# Section A - Your Company or Organisation details

Please provide your contact details in the table below.

|  |  |
| --- | --- |
| **Detail** | **Please provide your details below** |
|  | Job title/Position |  |
|  | Title |  |
| \* | Name |  |
| \* | Company/Organisation |  |
|  | Address |  |
|  | Postal code |  |
| \* | Country |  |
|  | Telephone number |  |
| \* | Email |  |
|  | Web |  |
| \* | Organisation type | Organisation involved in street lighting |[ ]
|  |  | Organisation involved in traffic signals |[ ]
|  |  | Public Authority |[ ]
|  |  | Energy Service Company (ESCO) |[ ]
|  |  | Installer |[ ]
|  |  | Manufacturer SME (< 250 employees) |[ ]
|  |  | Manufacturer large company (> 250 employees) |[ ]
|  |  | Engineering and/or lighting design company  |[ ]
|  |  | Non-Governmental Organisation (NGO) |[ ]
|  |  | Other (please specify: ) |[ ]

*\* Please provide these details as a minimum.*

# Section B – Scope

The following tables ask for information on the current scope.

|  |
| --- |
| Existing scope for street lighting and traffic signs |
| The existing scope in the current GPP criteria includes road lighting and is aligned to EN 13201. The scope of traffic signals is aligned to EN 12368  |
| **Category** | **Keep as it is** | **Add** | **Modify** | **Remove** | **Please provide your motivation and argumentation** |
| General scope |
| 1. Keep the scope aligned to EN 13201
 |  [ ]  |   |  |  |  |
| 1. Extend the scope for GPP street lighting beyond the definition in EN 13201 (e.g. parking lots)
 |  | [ ]  |  |  |  |
| 1. Keep traffic signals inside the scope of the GPP criteria
 |[ ]   |  |  |  |
| 1. Remove traffic signals from the scope of the GPP criteria
 |  |  |  |[ ]   |
| 1. Any other remark
 |  |[ ]   |  |  |

# Section C – Feedback on the current EU GPP criteria

# C1: Feedback on the current EU GPP criteria

Please indicate which of the current criteria and verifications (see criteria document) you think may need revision and, where appropriate, please explain how in your opinion they should be modified. The following tables summarise the structure of the current EU GPP criteria. If possible, please provide comments regarding core and comprehensive criteria.

| Feedback on the existing GPP criteria for **street lighting** |
| --- |
| **Category** | **Keep as it is** | **Modify** | **Remove** | **Please provide your motivation and argumentation** |
| Street lighting components | Technical specifications for street lighting components |
|  | 1. High pressure sodium lamps
 |[ ] [ ] [ ]   |
|  | 1. Metal Halide lamps (Ra < 80)
 |[ ] [ ] [ ]    |
|  | 1. Metal Halide lamps (Ra ≥ 80)
 |[ ] [ ] [ ]   |
|  | 1. High intensity discharge (HID) lamp ballasts
 |[ ] [ ] [ ]   |
|  | 1. Packaging requirements
 |[ ] [ ] [ ]   |
|  | 1. Ballasts for compact fluorescent lamps shall all be electronic
 |[ ] [ ] [ ]   |
|  | 1. Lamp Lumen Maintenance Factor (LLMF) and lamp survival factor (LSF) for high pressure sodium lamps and metal halide lamps
 |[ ] [ ] [ ]   |
|  | 1. Luminaires, ingress protection rating
 |[ ] [ ] [ ]   |
|  | Award criteria for street lighting components |
|  | 1. Awards for LLMF and/or LSF factors
 |[ ] [ ] [ ]   |
|  | 1. Awards for lower mercury content in HID lamps

(note: the values of the core criteria are the minimum values from RoHS Directive) |[ ] [ ] [ ]   |
|  | 1. Awards for higher ballast efficiency
 |[ ] [ ] [ ]   |
|  | 1. Awards for luminaires compatible

with systems equipped with appropriate dimming and control systems |[ ] [ ] [ ]   |
| Street lighting design | Technical specifications for street lighting design |
|  | 1. Maximum energy efficiency indicator for traffic routes (note: is not anymore in line with prEN 13201-5)
 |[ ] [ ] [ ]   |
|  | 1. Maximum energy efficiency indicator for conflict areas (note: is not anymore in line with prEN 13201-5)
 |[ ] [ ] [ ]   |
|  | 1. Maximum Upward Light Ratio (ULR) for street lighting luminaires
 | ☐ | ☐ | ☐ |  |
|  | Award criteria for street lighting design |
|  | 1. Awards for improved Energy Efficiency Indicator
 |[ ] [ ] [ ]   |
|  | 1. Awards for dimming
 |[ ] [ ] [ ]   |
|  | 1. Awards for lower ULR
 |[ ] [ ] [ ]   |
| Installation of street lighting | Technical specifications for installation of street lighting |
|  | 1. Specifications for information and documentation
 |[ ] [ ] [ ]   |
|  | Contract performance clauses |
|  | 1. Daylight controls and time switches
 |[ ] [ ] [ ]   |
|  | 1. Lighting installation compliance
 |[ ] [ ] [ ]   |
|  | 1. End-of-life according to WEEE Directive
 |[ ] [ ] [ ]   |

|  |
| --- |
| Feedback on the existing GPP criteria for **traffic signals** |
| **Category** | **Keep as it is** | **Modify** | **Remove** | **Please provide your motivation and argumentation** |
| Traffic signals | Technical specifications for traffic signals |
|  | 1. Maximum operating Wattage (at 25°C)
 |[ ] [ ] [ ]   |
|  | 1. Packaging
 |[ ] [ ] [ ]   |

# C2: Proposed topics for new EU GPP criteria

Hereafter are topics that are not included in the current criteria, but may possibly be included in the new criteria. It is also possible to suggest any new topic.

| Feedback on potential new GPP criteria for **street lighting** |
| --- |
| **Category** | **Add** | **Do not add** | **Please provide your motivation and argumentation** |
| Street lighting components | Technical specifications for street lighting components |
|  | 1. LED retrofit lamps
 |[ ] [ ]   |
|  | 1. LED luminaires
 |[ ] [ ]   |
|  | 1. Light poles
 |[ ] [ ]   |
|  | 1. Power Cables
 |[ ] [ ]   |
|  | 1. Metering and billing
 |[ ] [ ]   |
|  | 1. Smart controls apart from dimming control gear
 |[ ] [ ]   |
|  | 1. Any other
 |[ ] [ ]   |
|  | Award criteria for street lighting components |
|  | 1. Awards for LxByCz for LED luminaires[[2]](#footnote-2) (see draft IEC 62717), wherein:
* Lx is the LED luminaire rated life: the time where luminous flux declines to a percentage ‘x’ of initial luminous flux.
* By is the LED luminaire failure fraction: the percentage ‘y’ of a number of LEDs of the same type that fail to deliver the declared percentage ‘x’ of luminous flux at the end of rated life ‘L’.
* Cz is the LED luminaire catastrophic failure rate: the percentage of LED luminaires that have failed completely by the end of rated life 'Lx’.
 |[ ] [ ]   |
|  | 1. Any other
 |[ ] [ ]   |
| Street lighting design | Technical specifications for street lighting design |
|  | 1. Maximum AECI and PDI or installation efficacy (in line with prEN 13201-5), wherein:
* Annual Energy Consumption Indicator (AECI) [kWh/m²year] is the estimated annual power consumption of the road lighting system according to prEN 13201-5.
* Lighting Power Density Indicator (PDI) [W/(lx.m²) = W/lm] is the value of the system power divided by the value of the product of the surface area to be lit and the calculated maintained average illuminance value on this area according to EN 13201-3.

Note: this is the reverse value of installation luminous efficacy. |[ ] [ ]   |
|  | 1. Any other
 |[ ] [ ]   |
|  | Award criteria for lighting design |
|  | 1. Should there be specified values for awarding credits for improved AECI and PDI performance compared to the proposed maximum values?
 |[ ] [ ]   |
|  | 1. Should there be a Total Cost of Ownership calculation as part of the design?
 |[ ] [ ]   |
|  | 1. Any other
 |[ ] [ ]   |
| Installation | Award criteria for installation of street lighting |
|  | 1. Any other
 |[ ] [ ]   |

|  |
| --- |
| Feedback on potential new GPP criteria for **traffic signals**  |
| **Category** | **Add** | **Do not add** | **Please provide your motivation and argumentation** |
| 1. Any other
 |[ ] [ ]   |

|  |
| --- |
| **Your views on the current structure and ambition level for the criteria on Street lighting**  |
| *Please, provide your views. Do you think that the criteria structure is adequately addressed to represent current procurement procedures or should it be changed/rearranged? In addition, please specify your answer by giving your views on the level of ambition, specifically referring to 'core' and 'comprehensive’ criteria.* |

|  |
| --- |
| **Your views on the current structure and ambition level for the criteria on Traffic Signals** |
| *Please, provide your views. Do you think that criteria structure is adequately addressed to represent current procurement procedures or it should be changed/rearranged? Specify your answer by giving your views on the level of ambition, specifically referring to 'core' and 'comprehensive’ criteria.*  |

# C3: Additional questions about the current EU GPP criteria (exclusively for suppliers)

|  |  |  |  |
| --- | --- | --- | --- |
| **For suppliers** | **YES** | **NO** | **Please provide your motivation and argumentation** |
| 1. Have any of the current EU GPP criteria been difficult to comply with? (due to e.g. level of ambition) Which one?
 |[ ] [ ]   |
| 1. Can you identify any example where you have been dissuaded from taking part in the tendering process due to current EU GPP criteria? (*please provide reason.)*
 |[ ] [ ]   |
| 1. Do you think SMEs can comply with the current EU GPP criteria set? Or do you think it would be more difficult for SMEs than for big companies to comply with the criteria?
 |[ ] [ ]   |

# C4: Questions about the uptake of current EU GPP criteria (exclusively procurers and/or specifiers)

Please choose one of the following:

[ ]  I use or have been using the current **EU GPP** criteria. (Answer **Section 1 and 3**)

 If yes:

 [ ]  I have used all the EU GPP criteria for the tender

 [ ]  I have picked a few EU GPP criteria for the tender

[ ]  I use or have been using **other GPP** criteria different from the EU GPP criteria. (Answer **Section 1 and 3**)

[ ]  I have **never used GPP** criteria (Answer **Section 2 and 3**)

**Section 1**

|  |  |
| --- | --- |
| **Questions for procurers/specifiers of****GPP (other than EU GPP)** | **COMMENTS****(please also specify when applicable)** |
| 1. Please indicate which GPP criteria, standards or guidelines you are using.

Any supporting document is very welcome (including examples for cost assessment within GPP criteria) |  |
| 1. What are the reasons for using different GPP criteria than the EU GPP? (e.g. ambition level, means of verification)
 |  |
| 1. Do you have any other comments?
 |  |

**Section 2**

|  |  |
| --- | --- |
| **Questions for procurers/specifiers that do not use GPP** | **COMMENTS****(please also specify when applicable)** |
| 1. What are the reasons / barriers / constraints in place that have prevented you from using environmental criteria in your tenders?
 |  |
| 1. Do you have any other comments?
 |  |

**Section 3**

|  |  |
| --- | --- |
| **Questions for all procurers/specifiers of****GPP** | **COMMENTS****(please also specify when applicable)** |
| 1. Do you use other contract types that do not directly specify the products but rather street lighting as a service?
 | [ ]  No[ ]  Yes, please specify (e.g. one could share with us template contracts) |
| 1. Are you familiar with Energy Service Contracts (ESCO)?
 | [ ]  No[ ]  Yes, please specify: |

# C5: Additional questions about the current EU GPP criteria (exclusively for procurers and/or specifiers)

|  |  |  |  |
| --- | --- | --- | --- |
| **For procurers** | **YES** | **NO** | **Please provide your motivation and argumentation** |
| 1. Have you faced problems related with the number of offers complying with your criteria set (too few)?
 |[ ] [ ]   |
| 1. Do you think most SMEs can comply with the current EU GPP criteria set? Or do you think it would be more difficult for SMEs than for big companies to comply with the criteria?
 |[ ] [ ]   |
| 1. Has procurement using the current EU GPP criteria been more expensive compared to non-green public procurement?
 |[ ] [ ]   |
| 1. Other comments you may think useful
 |  |

# Section D – Additional request for supply of market and stock data to improve the technical background document

# D1: Questions about the stock and procurement of new street lighting luminaires (exclusively procurers)

|  |
| --- |
| **Estimate the current stock (2015) of installed lighting points per habitant in your region** |
| The preparatory study for street lighting lot 9 (2007)[[3]](#footnote-3) did found about 0.12 lighting points per habitant (Annex L). Do you have more precise data available on your region. |
| Light points per habitant (2005):…Light points per habitant (2015):…Region (please specify):..Total habitants in this region: … |

|  |
| --- |
| **Estimate the relative share of lit roads per category** |
| Based on the data of the preparatory study for street lighting lot 9 (2007) corrected to the current road length, typical pole distances and estimated stock, the share of lit roads per EN (&Eurostat) road category was estimated. If you have more precise data please share with us. |
| The estimate is that on average 14 % of so-called motorways or main roads are lit. They belong in EN 13201 (2014) to class M (ME, MEW).> In my region this is (2015): Click here to enter text. % lit for Click here to enter text. km total road length (class M)The estimate is that on average 20 % of so-called secondary and/or regional roads are lit. They belong in EN 13201(2014) typically to class C (CE).>In my region this is (2015): Click here to enter text. % lit for Click here to enter text. km total road length >These roads typically belong to EN 13201 road class C: [ ]  Yes [ ]  No (If no please specify road class according to EN 13201: Click here to enter text. )The estimate is that on average 41 % of so-called other roads in rural or residential areas are lit. They belong in EN 13201(2014) typically to class P ( or S).>In my region this is (2015): Click here to enter text. % lit for Click here to enter text. km total road length (Class P or S)Note: please provide any other statistics that might be relevant. |

|  |
| --- |
| **Estimate luminaire growth and replacement data per category** |
| The enquiry of preparatory study for street lighting lot 9 (2007) showed that the economic life time or life time before replacement is on average 30 years and the growth of new lit roads is about 1.2 %. When you have more precise data available on your region please provide the following estimates: |
| Average economic luminaire life time of motorways or main roads luminaires is: Click here to enter text. yearsThe share of renovation(replacement) in the total amount of annual luminaire installations in this category is: Click here to enter text. %Average economic luminaire life time of secondary and/or regional roads is: Click here to enter text. years The share of renovation(replacement) in the total amount of annual luminaire installations in this category is: Click here to enter text. %Average economic luminaire life time of other roads in rural or residential areas is: Click here to enter text. yearsThe share of renovation(replacement) in the total amount of annual luminaire installations in this category is: Click here to enter text. % |

# D2: Questions about the sales of street lighting luminaires (exclusively suppliers)

LED luminaires came only recently on the market. We could benefit from more accurate price forecasts to optimize the economic analysis in the revision of the technical background document. Only average values are welcome as well. If this is confidential information, please contact hans.moons@ec.europa.eu .

The current cost for decorative LED luminaire with 5000 lm (@ 100 h) rated flux and dimming control gear to be installed in a residential area is (>110 lm/W efficacy):

Minimum:

 Average:

 Maximum:

 Expected prices for these luminaires in 2020 (> 120 lm/W efficacy) are:

Minimum:

 Average:

 Maximum:

The current cost for functional LED luminaire with 10000 lm (@ 100 h) rated flux and dimming control gear to be installed in a conflict area road is (>120 lm/W efficacy):

Minimum:

 Average:

 Maximum:

 Expected prices for these luminaires in 2020 (> 140 lm/W efficacy):

Minimum:

 Average:

 Maximum:

The current cost for a functional LED luminaire with 20000 lm (@ 100 h) rated flux and dimming control gear to be installed on a motorway is (>120 lm/W efficacy):

Minimum:

 Average:

 Maximum:

 Expected prices for these luminaires in 2020 (> 150 lm/W efficacy):

Minimum:

 Average:

 Maximum:

Any other proposal is welcome.

**Thank you for taking the time to complete this questionnaire. If you have any further questions please do not hesitate to contact us at the following email address:** JRC-IPTS-STREETLIGHTING@ec.europa.eu

Please return the questionnaire to us **no later than 22 February 2015.**

1. <http://ec.europa.eu/environment/gpp/eu_gpp_criteria_en.htm> [↑](#footnote-ref-1)
2. ZVEI guide to Reliable Planning with LED Lighting: <http://www.schuch.de/sites/default/files/ZVEI_Planungssicherheit_LED_Englisch_14%2003%2014.pdf> [↑](#footnote-ref-2)
3. http://www.eup4light.net/ [↑](#footnote-ref-3)