



Environment and Spatial Planning
*Ministry of Housing, Spatial Planning and
the Environment*

Criteria for the Sustainable Public Procurement of **Cables and pipelines**

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1 Introduction

The Dutch government wants to take concrete steps towards a sustainable society, and to set a good example. Each year, government organisations spend more than EUR 50 billion on the purchase of Supplies, Services and Public works. By purchasing sustainably, the government can significantly boost the market for Sustainable Public Products. Governmental authorities have set clear objectives to achieve this: the central government is aiming for 100% Sustainable Public Procurement in 2010, while the municipalities aspire towards 75% in 2010 and 100% in 2015. Provincial governments and water boards have set themselves the target of at least 50% in 2010. 100% Sustainable Public Procurement is understood to mean that all purchases meet the minimum requirements that have been set for the relevant product groups at the time of purchase. More information on this topic is available from the website Sustainable Procurement (www.agentschapnl.nl/sustainableprocurement).

NL Agency supports government authorities in various ways to help reach these objectives. These include developing criteria for Supplies, Services and Public works procured by these authorities. This document focuses on the criteria for the Cables & Pipelines, the elaboration of the criteria in specification texts and a more detailed assessment of the criteria, as well as a number of points for attention in the pre- and post-procurement stages. Additional background information and considerations regarding the content of the criteria can be found in the criteria document on the website Sustainable Procurement www.agentschapnl.nl/duurzaaminkopen/criteria, available in Dutch only.

Government departments, utilities companies whether privatised or not, industry and other sections of commerce use underground cables and pipelines. This document deals with the sustainable aspects of this underground infrastructure in which government bodies are involved, Municipalities, provinces, Public Works, district water boards and the state government are all purchasers of underground cables and pipelines and all products, works and services related hereto.

In total, around five hundred bodies lay out an estimated one hundred million euros a year on this product group.

Mainly the municipalities play a major role in the planning and realisation of the underground infrastructure, both on newly-developed sites and in the redevelopment of the urban area. The prognosis is that up to 2015, around 900,000 new homes and 42,000 hectares of industrial zones will be developed. In this an estimated 100,000 kilometres of cables and pipelines with a value of several billion euros will be laid in municipal territory. Municipalities can play a proactive role in the underground spatial planning and the realisation of this capital-intensive infrastructure. This may be by exerting influence to encourage a sustainable manner of design, installation, management and finally removal of the underground infrastructure, including that of third parties.

A sustainably set-up and managed subsoil will ultimately result in a sustainable above-ground living environment. This element particularly requires the intervention of government.

Both as purchaser of products, services and works for its own underground cables and pipelines, and as director in the construction of the entire underground infrastructure, aspects may be mentioned which make our living environment more sustainable.

1.1 Definition of the product group

The product group Cables and Pipelines comprises all products, services and works with respect to underground cables and pipelines in which government bodies in one way or another play or could play an essential role.

1. The product group concerns the government's own cables and pipelines, for example the purchase or design of the physical cable or pipeline. This concerns the design, installation, management and removal phases.
2. Besides this, all services which aim to provide a protected, safe and properly accessible siting of cables and pipelines (also those of third parties) in the public subsoil belong to this product group. This concerns the initiation or planning phase.

Works, services and supplies are considered here.

Municipalities, water boards, Public Works, provinces, the Defence Pipeline Organisation (DPO) and Prorail procure all kinds of underground cables and pipelines which are currently used. This includes public lighting cables, drains, pipelines for the transport of hazardous substances and waste water transport pipelines with sizes of up to two metres. All facilities which have the aim of protecting these cables and pipelines and keeping them properly accessible are also procured and belong in this product group.

Cables and pipelines, including the facilities, are also referred to as the 'small underground infrastructure'¹.

In Appendix 1, the various government roles with respect to cables and pipelines are explained further.

The following objects are not counted as being in this product group:

- Cables and pipelines under management of TenneT;
- Cables and pipelines under management of all other cable and pipeline owners, other than government, such as utility and energy companies, industry and other commercial establishments;
- Urban heating systems. So far as is known, there are no, or only a very limited number of, government bodies which have urban heating systems independently in their ownership. Where these do in fact exist, they are in co-ownership with a utility company. The design will therefore be with said utility company;
- Objects which are already specifically dealt with in other product groups. This concerns the related product groups as described in section 4.2.

For the benefit of the contracting authority, a number of CPV codes that might be of relevance to this product group have been included in this document. The selection is by no means exhaustive or complete. The contracting authority will remain responsible for compiling the correct set of CPV codes to match the relevant tender.

The following CPV codes apply to this product group:

45231000-5	Construction work for pipelines, communication lines and power lines
45231112-3	Installation of pipesystem
45230000-8	Construction work for pipelines, communication lines and

¹ The adjective 'small' in *small underground infrastructure* means that this concerns infrastructure of 'small' diameters, not intended for the transport of people. It therefore concerns in almost all cases liquids, gases, signals (electrical or optical) or electricity. It thus mainly concerns cables or pipelines with a diameter not more than 5 to 10 centimetres. The largest pipelines in the Netherlands may have a diameter of around 2 metres or even more. By *large underground infrastructure* should be understood: tunnels constructed underground for the transport of persons and/or goods, mostly by means of a train or car. Their diameter in the Netherlands goes from around 7 (the bored Heinenoordtunnel) up to 13 metres (the bored tunnel under the 'Green Heart' of the Netherlands). The following definition may therefore be employed for small underground infrastructure: the entirety of underground means intended for the transport of liquids, gases, goods, energy, electrical and optical signals, excepting those facilities necessary for this transport such as pumping stations (both for supply and drainage), transformers etc.

	power lines for highways, roads, airfields and railways; flatworks
45232000-2	Ancillary work for pipelines and cables
45231100-6	General construction work for pipelines
45231200-7	Construction work for oil and gas pipelines
45231300-8	Construction work for water and sewage pipelines
28815100-9	Ducting
31321000-2	Electricity power lines
45231113-0	Pipeline relaying works
31310000-2	Mains
74313141-6	Pipeline-inspection services
45232411-6	Foul-water piping construction work
45232130-2	Storm-water piping construction work
74232220-2	Pipeline design services
28860000-8	Pipeline, piping, pipes, casing, tubing and related items
45232151-5	Water-main refurbishment construction work
45111290-7	Primary works for services
31224400-6	Connection cables
45232000-2 #REPEAT of no. 4	Ancillary work for pipelines and cables
45231400-9	Construction work for electricity power lines (insofar as these are found underground)
32572000-3	Communication cable
31352000-8	Optical-fibre cables
45314310-7	Installation of cable laying
28421140-2	Medium-voltage cable
31352200-0	Optical telecommunication cable
28421500-4	Signalling cable
28421100-0	Power cable
31320000-5	Power distribution cables
32520000-4	Telecommunication cable and equipment
32551000-0	Telephone cables and associated equipment

2 Sustainability in the procurement process

The criteria in this document have been classified in the various steps of the public procurement process. More information about these steps and how to combine them with sustainability can be found in the Sustainable Public Procurement Manual. This manual can be downloaded from the website Sustainable Procurement www.agentschapnl.nl/sustainableprocurement.

2.1 Preparatory stage (points for consideration)

In the preparation of a call for tender, many choices are made which have a great impact on sustainability. The inclusion of sustainability in the preparation of projects is not current practice and demands additional policy from the government bodies concerned. By involving sustainability in an explicit way at all stages, sustainable calls for tender gain more content and a sustainable realisation at a higher level becomes possible.

Every purchase or call for tender starts with drawing up the inventory of the needs of the internal or external customer. Sustainability can be incorporated into this stage by considering whether the purchase is truly necessary and whether a more sustainable alternative might be available. Specific points for consideration regarding procurements for the Cables and Pipelines product group are:

Ensuring sustainability in the project

The guarantee of sustainability demands that at an early stage, even before the formal start of the procurement phase, the sustainability aspects of the project are considered within the procuring organisation. In practice this will mean a collaboration among the project leader (advocate of technology and project result), the purchaser (financial advocate) and for example the environmental coordinator (sustainability advocate).

In the sustainable design of a cable and pipeline system, certain conditions are of importance to a proper organisation and the incorporation of sustainability into the process. Below are listed some general points for consideration for the process, as these are also to be found in the National Civil Engineering Sustainable Building Package (GWW = Civil Engineering; see also sources in section 4.1). Agree a common vision on sustainability with the parties involved;

- Agree the layout of the cables and pipelines (measure GWW 701);
- Organise sustainable building in the project (NP GWW 100);
- Take account of sustainable building in the project plan (NP GWW 101);
- Take account of sustainable building in communication (NP GWW 102);
- Take account of sustainable building in the composition of the project team (NP GWW 103);
- Take account of sustainable building in the financing of the project (NP GWW 104);
- Draw attention to risks in civil engineering projects, particularly with regard to the environmental effects to be realised (NP GWW 105);
- Take account during the design of future management and maintenance (NP GWW 106);
- In comparing cost aspects, employ the Total Costs of Ownership approach by which means the sustainability aspect will obtain (more) weight.

Besides ensuring sustainability in the process, there are opportunities to safeguard sustainability in the design, in the execution of works, in the usage phase or at the end of the

lifetime. Below are several points for consideration as listed in the National Civil Engineering Sustainable Building Package. The points for consideration are not always specific to cables and pipelines, but there are things in common with the product group Cables and Pipelines included in the measures concerned:

- Aim for re-use of materials which are released (NP GWW 511);
- Limit the production of waste in construction, use and management (NP GWW 513);
- Use secondary and reusable materials in ground works (NP GWW 403);
- Harmonise cables and pipelines with their future use (NP GWW 700);
- Harmonise the design of cables and pipelines with their future management and maintenance (NP GWW 702);
- Limit the use of environment-impacting materials (NP GWW 703);
- Record any unused lengths (for future extension);
- Aim for energy saving in civil engineering works (NP GWW 503);
- Prevent nuisance from vibration and noise (NP GWW 512);
- Limit traffic nuisance during implementation and maintenance (NP GWW 515);
- Restrict disruption of the surface and ground water system and the natural level and course of groundwater during the construction and use of works, and the natural quality of the groundwater in the construction and use of works; avoid contamination of the water system (NP GWW 201, 202, 203, 204 and 205);
- Attune the groundwork to the surroundings (NP GWW 400);
- Restrict damage to landscape, natural and historico-cultural values (NP GWW 401);
- In comparing cost aspects, employ the Total Costs of Ownership method by which means the sustainability aspect will obtain (more) weight.

2.2 Specification stage (criteria)

During the specification stage, the needs of the internal or external customer are translated into a tender document. This stage entails the formulation of:

- Criteria for supplier qualification. These could include grounds for exclusion, suitability requirements, i.e. requirements with regard to suppliers, and, in the case of restricted procedures, any selection criteria, i.e. wishes with regard to suppliers.
- A description of the minimum requirements pertaining to supply, service or task (the Schedule of Requirements).
- Award criteria, i.e. wishes regarding Supplies, Services and Public works. These are only applicable when the tendering process is based on the principle of the Most Economically Advantageous Offer ('Economisch Meest Voordelige Inschrijving' or EMVI).
- The contract stipulating the contract provisions.

More information on the various types of criteria and the various tender options can be found in the Sustainable Public Procurement Manual. Innovation is also included in the award criteria, where relevant. Innovation is oriented towards the development and introduction of new ideas and products.

The criteria in this document have been formulated to support the purchaser in the Sustainable Public Procurement of Cables & Pipelines. The criteria have been subjected to

legal review. However, every procurement and tender process is unique. For that reason, the drafting of a tender document remains the responsibility of the purchaser.

Overview of criteria

The criteria apply to new construction, reconstruction and also to the management and maintenance of existing cable and pipeline systems. Distinction is made in the table among the different forms of contract, such as design-only, design and construct, and construct-only.

Table 3.1 Overview of criteria for cables and pipelines

Area of application	Design	Construct	Design and construct	Manage and maintain	Removal
Criterion					
Technical specifications for Cables and Pipelines					
Removal of materials	-	-	-	-	X
Processing of released materials	-	X	X	X	X
Award criteria					
Energy-saving design	O	O	O	O	-
Contract provision					
Management and maintenance plan	-	X	X	X	-

X = include in this phase

- = do not include in this phase

O= optional

In the 'procurement' of cables and pipelines, you cannot generally comply merely by including the criteria for cables and pipelines. In general, the simultaneous carrying out of ground works, the use of heavy vehicles or mobile machinery, the installation of cables and pipelines and the hiring-in of external consultancy services and purchase of electricity will also need to be considered. The product group Cables and Pipelines may also form part of the product group Urban Planning and Design.

You can find the criteria for these products groups on the website:

<http://www.agentschapnl.nl/duurzaaminkopen/criteria>.

2.2.1 Supplier qualifications

No criteria have been formulated for this specific product group with regard to supplier qualification. More information on the possibilities of incorporating sustainability at this stage of the process can be found in the Sustainable Public Procurement Manual.

2.2.2 Schedule of requirements

The use of the criteria below does not exclude the use of any material whatsoever. If however the materials wood and/or metal are employed, technical specifications 1 and/or 2 are applicable.

Minimum requirements

Technical specification No. 1	<p><i>(For design, construct, design & construct, management & maintenance and removal)</i></p> <p>Removal of materials</p> <p>Excavated and released materials from the cable and or pipeline system must be transported to a processor recognised and certified for this work, clean of adhering dirt and soil and free from chemical contamination.</p> <p><u>Means of proof:</u></p> <ol style="list-style-type: none"> 1. Declaration from the tenderer that this technical specification is complied with. 2. List of recognised and certified processors to which material will be removed. 3. Copies of the certificates of the processors to which the material will be removed.
Notes for purchaser	<p>The nationally-applicable BIS (<i>Buizen Inzamel Systeem</i> = Pipe Collection System) coordinated by BureauLeiding in The Hague is the recognised collection system for materials released from plastic piping systems.</p> <p><u>Verification of means of proof:</u></p> <ol style="list-style-type: none"> 1. List of recognised and certified processors to which material will be removed. 2. Based on copies of certificates. 3. Collection of further information from the certification body.

Technical specification No. 2	<p><i>(For construct, design & construct, management & maintenance and removal)</i></p> <p>Processing/removal of released substances</p> <ol style="list-style-type: none"> 1. If stony waste is broken up, the breaking must take place according to BRL 2506. 2. Tar-containing asphalt (granulate) must be transported away to a processing and treatment establishment in the Netherlands, licensed on the grounds of the Environmental Management Act, for the thermal cleaning of the tar-containing material. 3. <i>(In the case of a temporary establishment, which does not come within the Environmental Management Act and the Activities</i>
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	<p><i>Decree)</i></p> <p>Provisions must be made on the implementation site to store separately or otherwise transport away separately the different types of waste arising from the activities, Provisions must also be made on the implementation site for the separate storage of released secondary raw materials.</p> <p><u>Means of proof:</u></p> <ol style="list-style-type: none"> 1. Declaration from the tenderer that he complies with this technical specification. <p><u>Further means of proof with regard to an aspect mentioned under point 1.</u></p> <ol style="list-style-type: none"> 2. A description of the means by which the tenderer complies with this requirement. If the tenderer or subcontractor possesses a KOMO product certificate 'BRL 2506 <i>beton en/of menggranulaat</i>' (concrete and/or mixed granulate) in the name of the tenderer or subcontractor, this requirement is fulfilled.
Notes for purchaser	<p><i>Explanation of point 2 of this criterion</i></p> <p>The purchaser is advised to employ CROW publication 210 '<i>Richtlijn omgaan met vrijkomend asfalt – Aandacht voor de teerproblematiek</i>' (Guideline for dealing with released asphalt – Attention to the tar problem).</p> <p><i>Explanation of point 3 of this criterion</i></p> <p>The part of the requirement concerning the separation of waste substances is indeed already a legal requirement for most establishments, arising from the Environmental Management Act, but because temporary establishments do not fall under this, said requirement is therefore stipulated here explicitly.</p> <p><u>Verification of means of proof:</u></p> <ol style="list-style-type: none"> 1. No further verification. <p><u>Further means of proof with regard to an aspect mentioned under point 1.</u></p> <ol style="list-style-type: none"> 2. A description of the way in which the granulate is processed, from which can be deduced whether this conforms to BRL 2506 concrete and/or mixed granulate. 3. A statement from the entity processing the granulate. 4. Check of the certificate on http://www.bouwkwaliteit.nl/

2.2.3 Award criteria

Award criteria

<p>Award criterion no.1</p>	<p><i>(For design and design & construct)</i></p> <p>Energy-saving design</p> <p>The more energy-saving a design for cables and pipelines is, the higher the tender will be graded.</p> <p>Assessment will take place based on a short description of the following elements which must be detailed in the design with an associated estimate of energy consumption.</p> <ul style="list-style-type: none"> - ... - [to be completed further by the purchaser] <p>The estimated energy consumption should be calculated in kWh/usage year.</p> <p>The plan will be assessed on its technical realism content and the level of the estimated energy consumption of the elements listed above.</p> <p>The tender will be evaluated as follows: [...]</p> <p><u>Means of proof:</u></p> <ol style="list-style-type: none"> 1. The short description of the energy-saving design.
<p>Notes for purchaser</p>	<p>The service inviting tender must detail this criterion further by awarding points, taking account of the relative importance of this criterion.</p> <p>The elements on which assessment will be done must be described clearly and unambiguously.</p> <p>As reference for example a comparison may be made with a similar system in which in any event the technical specifications as listed in this document are applied. In the replacement of an existing situation, the energy consumption of the old situation may serve as an upper limit.</p> <p><u>Verification of means of proof:</u></p> <p>No further verification.</p>

2.2.4 Contract

<p>Contract provision</p> <p>No. 1</p>	<p><i>(For construct, design & construct, management & maintenance)</i></p> <p>Management and Maintenance plan</p> <p>During the handover of the cable and/or pipeline system, a management and maintenance plan must be supplied, in which the maintenance measures are described which are necessary to maintain the cable and/or pipeline system. The plan should describe the means of management and maintenance, necessary to maintain the sustainable aspects of the cable and/or pipeline system. <i>[to be completed further by the purchaser]</i></p> <p>The plan should consist in any case of the following sections:</p> <ul style="list-style-type: none"> • Description of the management measures to be taken into account with inspection intervals for a period of XX years, with associated instructions (at least describing inspection points, methods, estimated number of person-hours); • Description of the maintenance intervals to be taken into account for a period of XX years, with associated instructions (at least describing maintenance activities and necessary materials and an estimate of the number of person-hours and any relationship with other activities for which for example.
<p>Notes for purchaser</p>	<p>The sustainable aspects of the cable and/or pipeline system may be relevant for example to the maintenance and management of certain materials and installations. A certain low-maintenance material may require a modified maintenance regime.</p> <p>If a change takes place such that a new maintenance and management plan is necessary, separate agreements must be made with the tenderer for this. Provisions for this may also be laid down in the contract.</p>

2.3 Utilisation stage (points for consideration)

After the procurement trajectory has been concluded and a product or service has been purchased, possibilities exist for using the product in a sustainable manner.

No specific points for consideration have been formulated for this product group.