

AUSTRIA¹ - ASFINAG

Context

At the beginning of 2010 the Austrian road financing agency (ASFINAG), the Austrian Touring Club and the Technical University of Vienna established a working group to find ways to encourage construction firms in the area of road reconstruction while traffic is maintained, to be creative and present alternative solutions when they participate in open procurement procedures. Starting points were the necessity to shorten construction periods, enhance the safety of drivers and reduce the impact on the environment. The working group worked on the assumption that bidders have a stronger motivation to submit alternative offers in a procurement procedure if they get partial remuneration.

The project is part of the compliance management system of ASFINAG.

Objectives

The essential tasks of the working group were the development of recommendations concerning the choice of procedure and the creation of a framework for general and concrete measures to achieve:

- The establishment of an incentive system for submitting alternative offers, which grants partial remuneration for economically sound alternative offers, even when these are not selected.
- The development of additional award criteria for the reduction of the construction period, the availability of road sections, the safety for road users and the impact on the environment.
- The establishment of an additional phase for optimising the project between the award of the contract and the actual execution of the works.
- The development of a bonus system for construction firms, which optimises the design/planning of the project, in order to transfer a share of the economic benefits generated by their design.
- Based on these conditions, the establishment of practical measures to promote the creativity of bidders for the reconstruction of the “Kaisermühlen” tunnel in Vienna.

Implementation process

Between February and December 2011 the working group developed a four-pillar model. Since the beginning of 2012, a project team (1.5 full-time equivalents) formed by experts from different departments of the company, like engineering and procurement management, has been working on the first pilot project, a tunnel reconstruction on a city highway. The project value is approximately EUR 80 million annually.

The first pillar is an incentive system based on the assumption that bidders are more willing to develop alternatives during the competition phase if the additional calculation costs are partly covered. Thus, the calculation costs of the two cheapest suitable alternative offers (one per bidder) which required additional calculations are remunerated according to a model calculation scheme. The model calculation also allows exceptional remuneration (with a capped amount) of especially innovative alternative offers.

The second pillar concerns the establishment of award criteria, which display the availability of traffic zones, the safety of road users and the impact on the close environment. The criteria are based on the assumption that the combination of the targets of the contracting authority (satisfaction of the

1. Case study submitted by the Austrian Federal Chancellery.

clients, quality, economically sound results) with those of the clients (availability and safety) and those of the bidders (rentability and safety of employees) should optimally contribute to achieving the criteria. The weighting of the criteria follows a model calculation scheme (matrix) and a recommendation to integrate different stakeholder representatives (from public authorities, traffic associations and business associations) into the bid evaluation board.

The bonus system for design optimising is the third pillar and aims at improving the economic efficiency of the design/planning of the project during the preparation of the execution phase or the construction phase under the condition that the quality is equal to the originally awarded contract. The system is based on the hypothesis that if economic efficiency is a common target of the contracting authority and the contractor, construction firms will be motivated to work in this direction. The contractor is therefore obliged to technically optimise the execution of the works while respecting the economic interest of the contracting authority. The contracting authority has, however, to transfer 50% of the savings achieved through the optimised planning in comparison to the original offer.

Value engineering (additional project improvement phase) constitutes the fourth pillar. Whereas the third pillar focuses on fine-tuning the design and planning of a project, the additional project improvement phase aims at optimising the planning of working routines and methods on the construction site, including scaffoldings, transport of construction materials, etc., while maintaining the quality and agreed volume of work. There is no remuneration scheme foreseen for this phase, it serves to benefit from the time between the award of the contract and the actual start of the construction works.

Impact and monitoring

So far, there are no figures or preliminary experiences available, because the first project (A 23 highway Inzersdorf) of this new model is in the planning phase.

Challenges and risks

Introducing new aspects into procurement procedures is often met initially with resistance from the part of the concerned businesses. It is therefore important to present the benefits of the new model to businesses to encourage the submission of innovative alternative offers. As past figures show, procurement procedures where alternative offers are admissible bear a higher risk of complaints, because it is difficult to define minimum requirements for the comparability with the official tender.

Another difficulty is achieving economic optimisation (value engineering) by accepting alternative offers while guaranteeing the technical equivalence of the suggested alternative solutions with the originally required level of quality.

Key lessons learnt

Economic necessity and unsatisfying experiences in practice (construction firms are reluctant to submit alternative offers in open procurement procedures) create the need to find innovative solutions, which require active participation of the concerned businesses and stakeholders.

It is important to respect the legal constraints and the principles of transparency and non-discrimination. Projects are carried out within the compliance management system, which requires close co-operation with all responsible departments.

AUSTRIA¹ - Horizontal action plan for sustainable procurement (naBe-Aktionsplan)

Context

In July 2010 the Austrian federal government adopted a horizontal action plan for sustainable procurement (“*naBe-Aktionsplan*”) and started its implementation. The plan:

- points out the importance of changing production and consumption schemes towards sustainable activities
- shows the public sector’s opportunities to influence this process
- offers practical orientation for public purchasers to design their procurement procedures in this respect.

Objectives

Given that Austria’s annual procurement expenditure covers approximately 17% of GDP, the public sector can contribute to sustainable economic development by the strategic use of public procurement. In this context, the efficient and economical use of natural resources is one of the most important conditions.

Implementation process

The action plan contains ecological criteria for 16 specific procurement categories. They must be used by the Federal Procurement Agency (Bundesbeschaffung GmbH, BBG), the public sector’s largest central purchasing body in Austria, per instruction of the Ministry of Finance.

The BBG tries to actively contribute to the target to reduce greenhouse emissions (GHG), which are generated by the public sector’s energy consumption, by purchasing electricity from renewable resources. The share of renewable energy sources in the demanded product mix increased from 40% in 2005 to 100% in 2010; the share of certified green electricity increased from 0% in 2005 to 3% in 2010.

Impact and monitoring

In this context, monitoring plays an essential role. The Federal Ministry for the Environment in co-operation with the BBG mandated the Austrian Environment Agency to analyse the impact of using ecologically sound procurement criteria for energy on GHG emissions during 2005 and 2010. The study was focused on energy procurement based on the action plan of the Austrian federal ministries and their services by using a computer assisted model (GEMIS-Austria).

The calculation of GHG emissions on the basis of the mentioned product mix shows that GHG emissions caused by the electricity consumption of the respective public services decreased although electricity consumption generally rose by 92% between 2005 and 2010.

1. Case study submitted by the Austrian Federal Chancellery.

Challenges and risks

The project serves as a model for purchasing electricity, which is verified by the calculation methodology applied in the mentioned study of the Austrian Environment Agency.

There is potential for the future, e.g. in building facilities, which are able to provide certified green electricity. Based on research a specific scenario “*Zertifizierter Ökostrom bis 2015*” (certified electricity until 2015) estimates the available potential as continuously increasing.

The BBG has the option to increase the procurement of green electricity from 3% in 2010 to 11% in 2015. To enforce this potential, the Ministry for Environment has to make the benefits visible to the other federal ministries.

Increasing the procurement of certified (with eco-labels) green electricity can lead to the development of facilities for renewable energy sources in the long run, because new or modernised facilities are a requirement for green electricity. This should lead to further reduction of greenhouse emissions.

Key lessons learnt

The consumption of electricity is forecasted to increase in the short term. The transposition of measures to stabilise and reduce electricity consumption should therefore be a priority in addition to increasing electricity from renewable sources. Legal and economic conditions are essential factors for developing facilities for green electricity able to provide sufficient quantities.

The BBG’s initiatives in the field of sustainable procurement in co-operation with the Ministry for Environment have contributed to raising awareness in the federal ministries and their services for efficient and economical use of resources. The first important steps were taken through the procurement of electricity, which were analysed in a study.

Increased demand of certified green electricity can be promoted by the Ministry for Environment. The stabilisation and reduction of electricity consumption of the public sector is the most effective measure to sustainably reduce greenhouse gas emissions and can therefore be seen as a common task.

For further information, see: www.nachhaltigebeschaffung.at.

AUSTRIA¹ - ÖBB Infrastruktur AG

Context

In 2008, the management board of ÖBB Infrastruktur AG (ÖBB Infra), the Austrian state-owned railways infrastructure company, decided to implement an environmental management system (certified according to ISO 14001) as a major pillar for the sustainable development of the company. A co-ordinator was nominated in July 2009 to deal with sustainability on a corporate scale, notably to develop guidance on sustainable procurement, as procurement was identified as one of the key areas related to the sustainability performance of the company. Given that ÖBB Infra's annual investment expenditure amounts up to EUR 2 billion (approximately 1% of Austrian gross domestic product), procurement is deemed as an important lever for the development of sustainable economic operations throughout the enterprise, so as to reduce the consumption of energy and resources. A guidance note on sustainable procurement was published in 2011.

Objectives

The sustainable procurement strategy aims at raising procurement officers' awareness for the integration of socio-economic criteria into the procurement process with a step by step approach in order to contribute to the following tasks:

- reducing the consumption of resources, utilities and energy
- avoiding waste and pollutant emissions
- increasing quality
- protecting biodiversity
- reducing internal and external environmental costs (e.g. costs for disposal or transport)
- increasing the transparency and plausibility of costs
- fostering innovation
- fair working conditions and income
- creating “green jobs”
- winning suppliers as strategic partners.

The strategy builds on the availability of information about sustainability criteria and internal guidance on specific opportunities as well as marketing the idea among stakeholders.

Implementation process

In early 2009 a working group was established to analyse the potential of sustainable procurement for the company, which led to setting sustainable procurement as a permanent target within the environmental management system.

1. Case study submitted by the Austrian Federal Chancellery.

With the support of external partners (*Institut für Bauökologie* and *Beschaffungsservice Austria*, the Austrian Institute for Building Biology and Procurement Service), the work focused on the integration of socio-economic aspects into the procurement of consumable goods and infrastructure projects and resulted in a guidance note, which was published in 2011.

The guidance note contains a short description of the general background of sustainable procurement concepts and the reasons for them, sums up initiatives and strategies in the field, points at the legal requirements and most importantly lists existing national and international eco-labels and their specific relevance for ÖBB Infra (and other infrastructure businesses) with an evaluation scheme. Criteria underlying the labels are explained and made transparent. The guidance note concludes with two practical examples concerning rail infrastructure construction, to provide a more concrete picture of how sustainable procurement could be realised.

In 2011 the management board adopted a decision with the following content:

- ÖBB-Infra AG commits itself to the principles of sustainable procurement
- procurement staff is instructed to integrate these principles into the procurement procedures
- check and if needed adapt the internal regulations concerning contracting and procurement
- approve the guidance note on sustainable procurement as a supporting document for procurement staff (integration into the management system).

A workshop was organised with external experts for procurement officers. Sustainable procurement is now an integral part of internal training programmes (for example “rail – ecology” seminars) and practical exercises serve to gain practical experience, especially in the field of construction materials and tension weights.

Impact and monitoring

Awareness for sustainability aspects has increased, together with the specific knowledge of participants, notably the procurement officers. Practical information is easily available. Sustainability is also set as a procurement principle for purchasing and materials management in the guidelines of the Austrian state-owned Railways Holding company.

Specific monitoring measures were planned for 2012 with a focus on the use of materials (concrete) and weights, for which no fixed performance parameters or standards exist.

Challenges and risks

A common phenomenon is the lack of resources in terms of staff to thoroughly monitor and evaluate the measures taken. In the field of construction materials, the establishment of technical standards is particularly complex and requires the adaptation of contract specifications. This increases the workload for procurement officers. It is therefore necessary to make positive effects visible through continuous dialogue and share best practices.

It is also important to develop standardised methods to calculate the total costs of ownership, as they are often neglected in practice.

Key lessons learnt

The success of a project requires the involvement and constant information of all essential persons at all stages. For this particular project, co-operation with recognised organisations (the Austrian Institute for Building Biology and Procurement Service) and suppliers was especially helpful.

One of the key findings is that as long as external costs and the costs-by-cause principle are not integrated into economic assessments on an obligatory basis, procurement by the lowest costs principle will dominate in practice. In this regard, precise legal requirements could be effective to promote “green” objectives and ensure that sustainable procurement is a standard rather than an exceptional procurement method.

Practice also shows that it is easier and more effective to integrate socio-economic criteria early in the procurement procedure, in the description of the subject of the contract and technical specifications.

The National Action Plan for Sustainable Public Procurement (which is not binding for ÖBB Infra) is a substantial step forward. Similar guidelines for sectors not included in this action plan are needed. Incentives like tax schemes for sustainable procurement would also promote green solutions.

For further information see:

www.oebb.at/infrastruktur/de/5_0_fuer_Generationen/5_2_Verantwortung_Umwelt/index.jsp.