

Furniture framework applying circular economy principles

City of Malmö (Sweden)

Background

The [City of Malmö](#) is Sweden's third largest city, with a procurement volume of around €0.9 billion per year. Malmö has been actively implementing sustainable procurement over many years, which it defines as procurement that helps to achieve the goals of the [Environmental Program for Malmö City 2009-2020](#) and United Nations Sustainable Development Goal 12 – [Sustainable Production and Consumption](#).

With 26,000 employees, the City of Malmö's furniture needs are significant. The city has already developed high standards for new furniture, particularly in relation to minimising hazardous chemicals. It also has services and tools that support the reuse of furniture within the organisation. An internal online 'market place' (called Malvin) already exists, where employees can advertise spare furniture or can search for what is already available within the municipal body. The Employment Unit, Labour Market and Social Administration (ASF) also offers internal services for furniture (including moving, cleaning, painting, carpentry, textile work, and upholstery).



Despite these tools and services, however, Malmö estimates that it disposes of around 70 tonnes of furniture a year, some of which is recycled, and the rest is sent to landfill. This represents a waste of materials, and a waste of embodied energy. But by applying the principles of a circular economy – including reuse, remanufacture and repair – it is possible to reduce resource use, lifetime environmental impacts of a product, and waste at the end of a products life (for more information, see the European Commission's [Public Procurement for a Circular Economy](#) brochure).

Procurement objectives and preparation

In 2018, Malmö decided to [pilot a procurement approach](#) that would increase the reuse of furniture, while drawing as much attention as possible to existing internal services. This pilot was conducted as part of the EU-funded [Circular PP](#) project, which aims to use public procurement in the Baltic Sea Region as a catalyst for the transition to a circular economy.

Malmö decided to use a framework contract, in order to support more than one supplier, and encourage a healthy, competitive market in furniture reuse and refurbishment. The framework includes office furniture, conference furniture, and preschool and school furniture, and in addition to the City administration, the framework can also be used by Malmö's seven publically owned companies.

An initial draft of the reused furniture framework was prepared and reviewed internally. Malmö also sent it to four known suppliers for an external review.

Prior to publishing the tender, Malmö also visited furniture suppliers in the region. This was helpful for understanding what furniture is available, and in what quantities. It was possible to observe first hand that a large amount of high quality, functional furniture is available second-hand, and that suppliers have strict functionality and safety standards regarding the furniture that they collect for resale.

Behaviour change

Encouraging behavioral change is a fundamental objective of this tender. A 'priority list' was developed alongside the creation of the new framework contract to guide users' actions when a need for furniture arises. The priorities are as follows:

1. As a first preference, furniture already owned by the City of Malmö should be used (i.e. furniture in storage or being advertised on Malvin).
2. If furniture requires renovation or refurbishment, this can be done by the ASF.
3. If internal renovation is not possible, this work can be carried out by a supplier of the reused furniture framework.
4. If no existing furniture is found within the City, it can be purchased using the reused furniture framework.
5. If no reused furniture meets the needs of the user, it can be purchased from the new furniture framework.
6. If furniture owned by the City of Malmö is not considered to have any resale value, it can be sent to recycling. This is the last step of the furniture lifecycle and should be avoided as far as possible.

"In order to ensure the framework has impact, Malmö has also focussed on awareness-raising and behaviour change. For example, it hosted two 'framework briefing' seminars, attended by the four selected suppliers plus users, buyers, and other stakeholders interested in the new approach (with around 30 participants attending each seminar)."

Criteria used

Subject matter of the contract:

Re-used furniture and related services.

Service description:

Ten services were requested as part of the framework, the first five of which were mandatory. These included:

1. Reconditioning: the supplier must be able to recondition the purchaser's furniture, i.e. restore to a near original condition by replacing parts and steam cleaning.
2. Furniture upholstery: the supplier must be able to re-upholster furniture according to the wishes of the client.
3. Carpentry and painting: the supplier must be able to repair joinery and repaint the client's existing furniture and furnishings.
4. Redesign: the supplier must be able to reuse frames and materials to transform a piece of furniture or furnishings from one colour or function to another according to the client's wishes. For example, the supplier must be able to manufacture a reception desk, convert a conference table to a coffee table, make shelves from old desks, or spray paint a chair, etc.
5. Interior analysis with action: the supplier must be able to supply advice on the best furniture and design to meet workspace needs.

Bidders were asked to provide an hourly cost rate (including VAT) applicable to all mandatory services. If selected for the framework, the fixed price quoted in the tender will act as a ceiling price, meaning the supplier can only offer the same or lower prices.

Delivery and installation costs were also linked to an hourly price/ceiling price of €46 (500 SEK), according to the tender, and a general discount rate (in percent) on reused furniture could also be offered. This is regarded as the lowest discount across the length of the contact, and the supplier can offer higher discount rates when responding to specific requests for service.

As this framework was a new approach to buying furniture, Malmö did not want to exclude good potential suppliers, but rather saw it as an opportunity to work collaboratively with suppliers to develop circular business models. As such, Malmö listed an additional five services which were desirable but not mandatory (and were therefore not assessed):

1. Temporary spare furniture: if furniture needs to be removed from the premises for repair or refurbishment, it is desirable that the supplier provides a temporary replacement.
2. Inventory of existing furniture: it is desirable that the supplier can carry out an inventory of furniture in smaller and larger premises, which would document furniture type, manufacture, colour and condition.
3. Repurchase/sell: it is desirable that the supplier, at the request of the purchaser, is able to buy furniture or replace furniture.
4. Rent: it is desirable that the supplier offers short- and long-term furniture rental. This could include, for example, the complete furnishing of an office for a maximum three month period, or renting furniture for an event for a couple of days.
5. Storage: it is desirable that the supplier can offer storage where the equipment is made visible via a digital system.
6. It was also required that the supplier have good knowledge of the furniture's material composition, and could ensure that products delivered did not contain materials, such as chromium and PVC (polyvinyl chloride).

Award criteria:

Bidders were requested to provide an action plan for each of the following themes:

- Circular development;
- How Malmö can incentivise the use of the new framework, and;
- How the tenderer will collaborate with the city, its internal services, and with other suppliers.

The themes were equally weighted (33%) and scored according to their 'Degree of Circularity'; i.e. the extent to which the supplier fulfils the City of Malmö's priorities. The action plan had to specify the suppliers' goals, strategy, risks, actions, as well as include a proposal for one or more key figures that the supplier could measure.

Circular development: the extent to which the supplier fulfils circular goals within different furniture flows (i.e. maintenance, redistribution, repair, repurpose, and recycling).

Circular development was evaluated according to:

- The supplier's goals for circular development;
- How well the supplier's goals align with the City of Malmö Environmental Programme and the UN Global Objective 12 on Sustainable Production and Consumption;
- The supplier's knowledge of circularity in the furniture industry;
- Feasibility of the Action Plan, including risks and actions;
- Development plan and expected rate during the contract, and;
- Quality of proposed key figures.

Incentives for using the services: the supplier must specify an action plan that describes what incentives are required for each of the six furniture flows to ensure use by both the client and supplier.

Incentives were evaluated according to:

- The extent to which the suppliers' proposed incentives and Malmö's urban goals correlate;
- The extent to which the suppliers' proposed action plan guarantees the suppliers' circularity, and;
- The extent to which the suppliers' proposed action plan guarantees the circularity of the City of Malmö.

Cooperation: the supplier must specify an action plan that describes how the supplier wants to organise the cooperation with subcontractors, other players and the City. The supplier must take into account prevailing conditions, the desired target, as well as the efforts that would be required by the supplier, subcontractors and the City to achieve the goals.

Cooperation was evaluated according to:

- The extent the supplier matches the prevailing conditions in the City of Malmö;
- The feasibility of the action plan, including risks and actions;
- To what extent the supplier has insight and experience of working with subcontractors and other actors, and;
- To what extent the supplier considers the design of the cooperation with subcontractors and other actors.

Using the framework agreement

Clients from the City of Malmö can use the framework by sending a written request for offers to one or more framework supplier(s). After dialogue, the client receives a quote for the service, including furniture price, hours required for execution of the service, delivery time, etc. The client can then register the offer as an order in the e-commerce system. The selected supplier is the one whose offer best meets their needs according to the following non-ranked parameters:

- The characteristics of the product – that goods have the correct properties, including size, material, design, fire protection, etc.
- Adaptation of the product to existing furniture and other furnishings – that goods should fit in with existing ones, to obtain an overall uniform visual impression.
- The product's adaptation to the room's design and functionality – that goods should fit into the premises design and functionality to obtain a comparable visual and/or functional uniform impression.
- Execution of related services.
- Delivery time.
- Price of goods and related services.



Image: Pixabay / Macb3t

Results

The call for tender was published in November 2018, and the framework agreement was signed at the end of January 2019. It will run for at least two years, with a possible extension up to an additional two years.

Of the four suppliers engaged in the initial market consultation, three submitted tenders, and one additional tender was received, demonstrating that the Call for Tenders was accessible to suppliers who had not been directly consulted. Thanks to the initial supplier consultation process, no questions were raised during the tendering process, and all four tenders met all requirements.

Three of the framework suppliers are small businesses focussing on second-hand furniture and services, while one is a larger company that also produces and sells new furniture.

The estimated contract value is approximately €370,000 per year (4 million Swedish Krona) excluding value added tax, and, over time, it is hoped that the quantities purchased using this framework will increase, while the quantities purchased using the framework contract for new furniture will decrease. It is estimated that buying from the reused furniture framework will be around 20-30% cheaper, with the added benefit of shorter delivery times.

In order to ensure the framework has impact, Malmö has also focussed on awareness-raising and behaviour change. For example, it hosted two 'framework briefing' seminars, attended by the four selected suppliers plus users, buyers, and other stakeholders interested in the new approach (with around 30 participants attending each seminar). The seminars aimed to make using the new framework as easy as possible, and promoted greater understanding and uptake of the Priority List and of reused furniture options.

Environmental impacts

Between 80-90% of the environmental impact of furniture is linked to the materials and components used to produce it, but once in use, furniture has virtually zero impact. This means that the most effective way of reducing the environmental impact of furniture is to increase its useful life. For example, one study has found ([source](#)) that the carbon footprint of a typical office chair (82kg CO₂e) and a typical office desk (146kg CO₂e) can be reduced by 45% and 35% respectively through minimal refurbishment which leads to a doubling of lifetime; even a more intensive refurbishment like the complete replacement of a desk surface can still lead to a 20% reduction in CO₂ emissions (see the [Technical Background Report](#) of the [EU Green Public Procurement \(GPP\) Criteria for Furniture](#) for more information).

A key issue which the furniture refurbishment industry faces, however, is the lack of demand from public authorities in Europe, and a lack of experience with such contracts. Pilot procurements such as this one demonstrate that the market is ready to supply quality products which meet public sector needs.

The first purchases have already been made using the framework, and these early experiences have reported that it is straightforward to use.

Lessons learned

Start slowly: As this is the first framework of its kind in Malmö, they decided to start slowly with 'soft' requirements, i.e. writing an Action Plan. By completing action plans, suppliers can demonstrate their circular maturity and future level of ambition. It also provides a measure against which performance can be measured and followed-up.

Know the market: doing market research was an important step in the success of this tender. By learning about suppliers' business models, and using this to develop criteria, Malmö were able to ensure that suppliers could offer a complete portfolio of services. The feedback from suppliers has been positive. They have found that it supports a more comprehensive circular service, with fewer restrictions than comparable public purchases.

Flexible ambitions: Malmö already has high GPP standards for new furniture, and initially wanted to transfer these same high standards into the tender for reused furniture. However, including the same documentation and material declaration requirements was not compatible with reused furniture. Therefore a middle-way had to be found: used items do not need documentation, but new materials used as part of refurbishment of furniture need to meet the same high standards required of new furniture.

Unneeded furniture: Another point of discussion in this process was whether it is possible for a municipality to sell unneeded furniture to a company. It was concluded that it is possible, as long as it is done as an auction, with all four suppliers asked for a quote and the furniture being sold at the best price.

Behaviour change: Behaviour change will be fundamental to the uptake and success of this framework. In addition to creating the Priority List and hosting 'framework briefing' seminars to introduce the framework to buyers and users, Malmö intends to continue the promotion of this framework through the year – for example, it plans a campaign in Autumn where it will ask buyers and users to take pictures of their 'new' reused furniture.

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For related information, please see [European GPP criteria for Furniture](#) and the [Technical Background Report](#).