

Handbook for reuse off site

How can reusable materials be extracted from public buildings ?

Reduce the environmental impact of your building sites at no extra cost by encouraging reuse before and during a public works contract

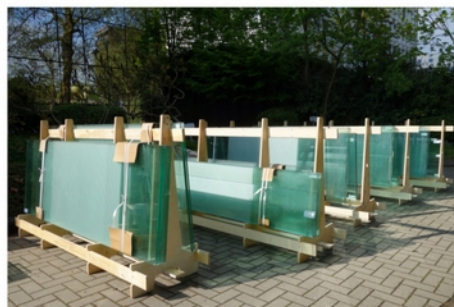
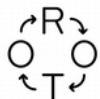
- Via
- A public service contract
 - A sale
 - A donation
 - A 'best efforts' obligation

Easy to organize using downloadable document templates

Notice: This translated version of the handbook includes some untranslated documents pertaining to Belgium-specific legislation.

This document was prepared on the initiative of Rotor asbl with the support of the Brussels-Capital Region.

Translated from the 29/09/2015 version



Are you a public contracting authority?

Are you involved in a development, renovation or building project requiring the demolition of all or part of a building?

Do you believe that demolition does not necessarily mean throwing everything away? That some materials can still be used? That you could make savings by recovering them?

Do you wonder how to identify reusable materials? How do you organise their disassembly and their transfer to interested buyers? What approaches and procedures are worth considering?

Have you answered yes to one of the above questions?

Then this Handbook is for you!

What is reuse?

Reuse is a practice that consists of reusing existing materials rather than discarding them as waste and replacing them with new products.¹ Reuse is different from **recycling**, which involves physical or chemical operations to return the materials to their raw material state.

The Handbook is dedicated to **the extraction of reusable building materials with a view to their reuse off site**, i.e.: the careful disassembly and removal of reusable building materials incorporated in a building with a view to (re-)using them in other construction projects.²

¹ Reuse is defined in waste legislation as: “any operation in which products or components that are not waste are used again for an identical purpose to that for which they were designed” (ordinance of the Brussels-Capital Region of 14 June 2012 on waste, B.M., 27 June 2012, art. 3, 18°).

² The Handbook does not specifically deal with the following situations:

- (a) the reuse of the building materials on site, i.e.: the (re-)use of building materials, that have been previously disassembled on the project site itself, in a development, renovation or building project. On this matter, see the [Guide pratique](#) (Practical Guide) developed by the non-profit organization Resources (2013); and
- (b) the transfer of materials that have **already been disassembled**.

The Handbook’s recommendations can, however, easily be reapplied to these situations with some marginal adjustments.

The advantages of reuse

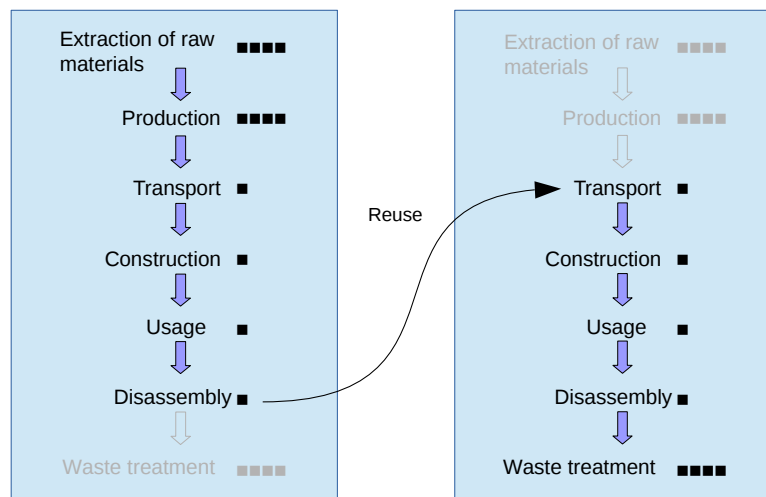
Reuse enables you to:

1. **Reduce the overall environmental impact** of your project by putting materials of high added environmental value on the market.



Material extracted from the source building

Material replaced in a new project



Reuse makes it possible to avoid some of the stages in the life cycle of building materials that have a particularly harsh impact on the environment, namely: the end-of-life stage (recycling, incineration, removal to landfill) and the production stage of new materials.

2. Give a **value** to materials that otherwise would be disposed of as waste.
3. **Manage your site more effectively at no extra cost, even making savings.** As things stand, you must always pay for the removal of materials demolished during your project. This can be quite a substantial expense of 200 to 3600 €/tonne depending on the complexity of the demolition work.³ However, your reusable materials could generate income rather than outgoings if you sell them to the highest bidder. In any case, you can always encourage reuse without spending any more than you would have had to pay for a traditional destructive demolition.

³ Average costs calculated on the basis of the schedule of unit prices for demolition work (Union Royale Professionnelle des Architectes (UPA-BUA), Schedule of unit prices, 2014 edition, vol. 0 "preparatory work", part 03 "demolition").



Le saviez-vous ?

The waste hierarchy

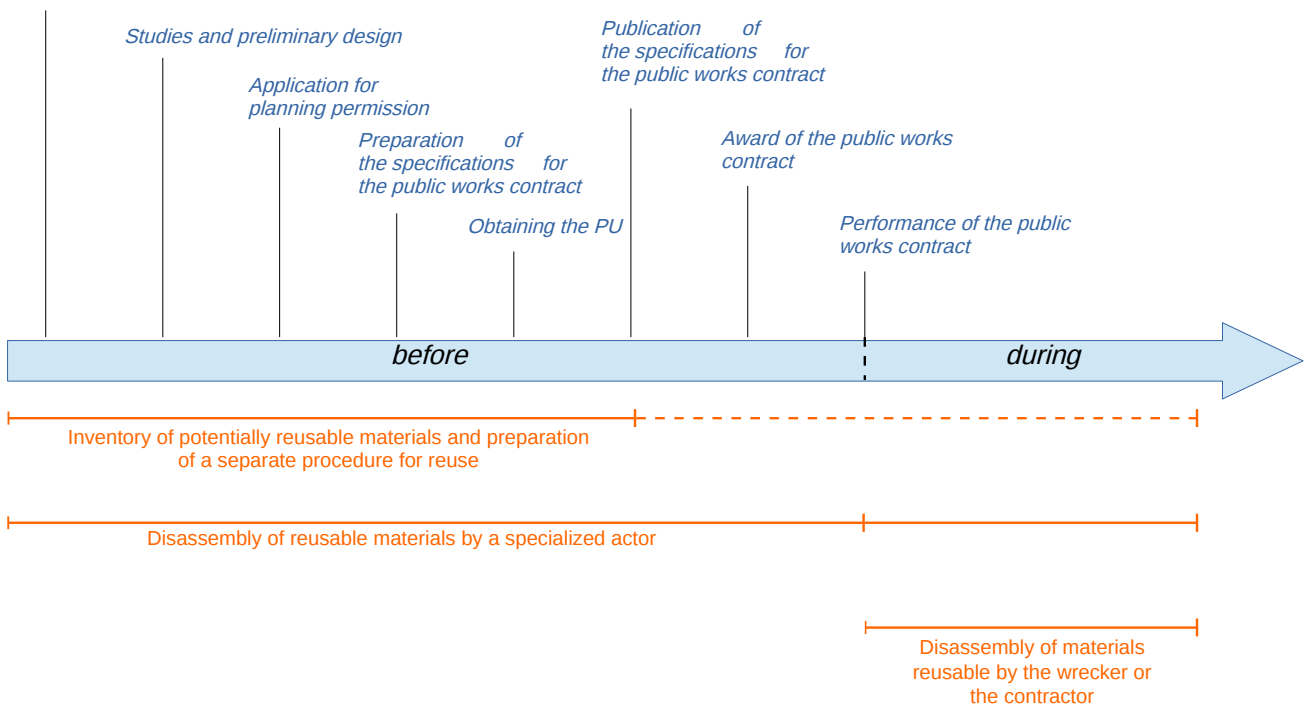
the prioritizes prevention of the appearance of waste through the reuse of existing products, over waste management measures (such as recycling or the preparation of waste for reuse). The regional and local public authorities have an obligation to respect this hierarchy in their resource management policy.

In addition, the Brussels-Capital Region sets the Brussels public authorities the objective of introducing environmental clauses in at least 20% of public contracts for an amount over EUR 30,000 to be approved between 1 January 2015 and 31 December 2017.

See aforementioned ordinance of the Brussels-Capital Region dated 14 June 2012 on waste, art. 3, 17°, a); 3, 18°, 16 and 21-23. ordinance of the Brussels-Capital Region of 8 May 2014 on the inclusion of environmental and ethical clauses in public contracts, Belgian Monitor, 6 June 2014, art. 4 and 9.

4. **Manage your site in an exemplary manner** while complying with the **waste hierarchy** and the objectives fixed by the Brussels-Capital Region relating to the inclusion of **environmental clauses** in “green” or “ecological” public contracts (see box).
5. **Stimulate the development of second-hand building materials** sector in the Brussels-Capital Region and beyond. When you launch an ad hoc procedure to encourage reuse, you give professional acquiring parties of reusable materials (SME, social economy enterprises) direct access to the materials. Such access is unusual in the context of the public works contract, which is mostly oriented towards general enterprises and demolition firms. Furthermore, you encourage the emergence of new stakeholders in a sector creating jobs that are non-outsourcable and accessible to poorly-qualified profiles.
6. **Act innovatively before or during the public works contract.**

Decision by the MO to initiate a development or transformation project



Before the public works contract

The period preceding a demolition or transformation site is often lengthy. It is not uncommon for there to be several months, or even years, between the decision being taken to demolish/transform and the time when work actually begins.

You can use this period to organise the disassembly of the reusable materials: Identify the reusable materials, plan the disassembly, start an ad hoc procedure for the disassembly of the materials. In this way:

- you ingeniously exploit a **period of calm** during which the building is accessible and subject to less pressure than after work has started;
- You ensure the precautions required by a **clear legal framework** for the disassembly prior to reuse; and
- You guarantee the **quality** of the reusable materials extracted according to the rules laid out by specialists.

You can introduce the question of reuse via **the public architecture contract** (see annex 4) by identifying the materials suitable for reuse on and off site with your architect. In addition, whenever possible, you assign the disassembly of the reusable materials to one or more specialist operator(s), by means of an **ad hoc procedure, organized as early as possible before the public works contract** (→ see Step 3: Choosing between the public service contract, sale or donation (route A1., route A.2. or route A.3.)).

During the public works contract

It is not always possible to take action before the start of work (→ see Step 2: Getting involved at the right level (route A, route B or no route)). In this case, you encourage the demolition firm or contractor to gradually integrate reuse in their practice during the execution of the public works contract. You invite them to define a specific period devoted to the disassembly of reusable materials in the work plan, to contact potential acquiring parties of the materials, to provide you with a recovery summary at the end of the project, etc. (→ see Summary of route B: Best efforts obligation).)

To disassemble the reusable materials before obtaining planning permission, check with your architect whether the disassembly of the reusable materials falls within one of the categories of acts said to be of "minimal importance", which are exempt from planning permission under the terms of the order of the Government of the Brussels-Capital Region dated 13 November 2008. For example, see the permit exemption aimed at certain transformation and interior development work (art. 9).

See the order of the Government of the Brussels-Capital Region dated 13 November 2008 determining the acts and work exempt from planning permission, the approval of a planning officer, the commune, the Royal Commission of Monuments and Sites and the Consultation Committee, together with the special advertising measures or the intervention of an architect, B.M., 02 December 2008.

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How is the Handbook used?

First, you opt for the best **strategy** to encourage reuse off site on a case-by-case basis:

- Either you organize an ad hoc procedure for reuse as early as possible before the public works contract: you follow route A. Depending on the case, you organize a **public service contract (route A.1.)**, a **sale (route A.2.)** or a **donation (route A.3.)**.
- Or you make the demolition firm or the contractor responsible for making every effort to prioritize reuse off site during the public works contract: you follow **route B**.

A simple 4-step process set out in the following pages enables you to quickly identify the strategy best suited to your case.

Next, you complete the technical and legal **document templates** related to your strategy, which are downloadable from pages **20** and following. You can also implement your strategy in as short a time as possible. These documents can be used as **ready-to-use models** or as a source of inspiration **to adapt** according to your own practices and characteristics.

More detailed information on the proposed procedures is available starting on page **27**. This will be particularly useful if you are not familiar with the legislation on public contracts.

Among the document templates annexed to the Handbook, you will find: inventory template, special specifications, tender form, contract notice, decision setting the conditions of the procedure, comparison of tenders table, etc.

Before: Did you say “reusable”!?)

There is no fixed definition of what constitutes a reusable material. The distinction between what is a reusable material and what is not depends on a number of factors, in particular:

True Story...

An owner wants to transform a former industrial warehouse. The building's roof is covered with old tiles. He thinks it would be worthwhile to recover them, as there are a lot of them and they are easy to remove. But after talking to specialist buyers, he learns that this type of tile is no longer in demand. The contracting authority therefore decided to exercise caution and not start a special procedure to recover the tiles.

Another true story ...

A municipality wants to demolish an old building to make space for a new public facility project. At first sight, it looks like the building contains nothing of interest. A dealer specialising in old bricks nevertheless visits the premises. He discovers that some of the walls are composed of 'brusselse klampstenen', a very fashionable brick in Brussels in the early 20th century. A real classic on the reuse circuit that justifies organising an ad hoc procedure (in this case, a public service contract → see Step 3: Choosing between the public service contract, sale or donation (route A1., route A.2. or route A.3.)).



- **technical factors:** the implementation and disassembly techniques influence the possibility of recovering the materials. For example, old bricks laid with lime mortar are clean and easy to disassemble, and therefore to reuse. On the other hand, the same bricks laid with cement mortar are much more difficult to recover.
- a **time factor:** A material might be of interest to an acquiring party of reusable materials in January, but no longer in March, as his warehouse has since become full or he is now busy on other projects.
- **economic factors:** most often, a material for which the resale price on the second-hand market is very close to the material's price when brand new will not be a worthwhile option for reuse. For example: basic toilet bowls that can be easily recovered from numerous buildings struggle to compete with their new equivalents sold at low prices.
- and even **organizational factors:** the careful disassembly of materials generally requires more time. Also, the time allowed for the disassembly phase in the site schedule plays a crucial role in what can actually be disassembled and recovered.

Ultimately, a material is reusable if it is in demand by at least one market player at a given moment.

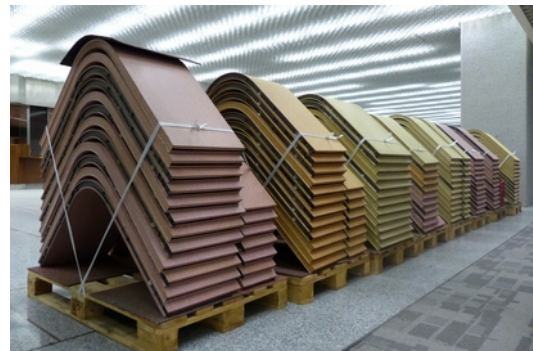
It is therefore a perspective that is both curious and prudent that must guide the contracting authority in its approach to reuse.

Curious: a material that initially seems uninteresting to you may have a history or a technical characteristic that makes it a real jewel in the eyes of potential buyers. Briefly: don't rule out a material too quickly as an option for reuse.

Prudent: however, a material that is of high value in your eyes might not find a buyer for a number of reasons (economic, time-related, etc.) that are completely foreign to you. In other words: forget the idea of referring to a list of materials that will always be reusable because there is no such list!

What should you do in practice?

The reuse market is constantly changing. In this context, in case of doubt about the reusable nature of a material, it is better to think of it as potentially reusable and verify this premise by testing market interest → see Step 1: Diagnosis – testing market interest.



La nature des matériaux libérés lors des transformations évolue sans cesse avec l'arrivée sur le marché de matériaux issus du patrimoine récent (par exemple : des panneaux HPL, des faux-plafonds acoustiques...) à côté de matériaux « intemporels » comme la brique de façade pleine ou le pavé en pierre, ou encore de véritables pièces de patrimoine ancien.

Step 1: Diagnosis – testing market interest.

The best way to know whether or not a material is reusable is to **test the waters of the market**.

A simple way to do this is, for example, to:

- **Take photos** of each type of potentially reusable material (→ see: **Before: did you say “reusable”!**? and below). The photos must give an overview of the material in its environment to enable potential acquiring parties to make a rapid assessment of its interest. It can sometimes help to add photos of details to attract the attention of potential acquiring parties to a defect or a particular quality of the material (for example: signs of wear) or to its fastening systems.
- Compile these photos in a **document**, mentioning the information you already have, such as: (a) the date of construction of the building, (b) the expected duration of the disassembly period, (c) the unit dimensions of the material, or (d) the total quantities available.
- **Send** this document by email to a number of **parties that may be interested in acquiring reusable materials**, asking the following question:

Good to know

The site <http://opalis.be> contains a list of the main parties acquiring second-hand materials in Belgium. It provides a good overview of the key materials of the market. Some dealers specialize in specific materials: These can be identified by searching for "[matérials](#)".

“If I decide, as a public sector contractor, to implement a special procedure to extract the reusable materials identified in the annex (in the form of a public service contract, a sale or a donation), do you think there are parties who would be interested in acquiring these materials? Would you be inclined to extract the materials yourselves in accordance with such a procedure? If not, would you be inclined to buy the materials from the demolition firm after disassembly?”



To comply with the legislation on public contracts, you will ensure that this question is succeeded by the following note: "This exploration, prior to a possible decision to launch a procedure, is authorised by the legislation on public contracts and by the general principles

applicable to contracts that are not subject to this legislation. However, it must not lead to a form of per-negotiation with certain enterprises. In the event of the ulterior organization of a procedure, all of the information communicated during the exploration phase will be attached to the advance advertising notice. The contracting authority reserves the right not to launch a procedure, without this giving rise to any form of compensation in favor of the enterprises consulted during the exploration phase."

See the Royal Decree of 15 July 2011 on the award of public contracts in the traditional sectors, B.M. 09 August 2011, art. 5.

Other indications

Professional dealers are not the only ones able to assess whether a material has a good chance of being reused. You can also request the opinion of your **architect**, a **contractor** or **another specialist** in this market (such as an antique dealer, for example, if you think the materials might have a particular historical or heritage interest).

You can also **make an assessment yourself**, by answering the following questions:

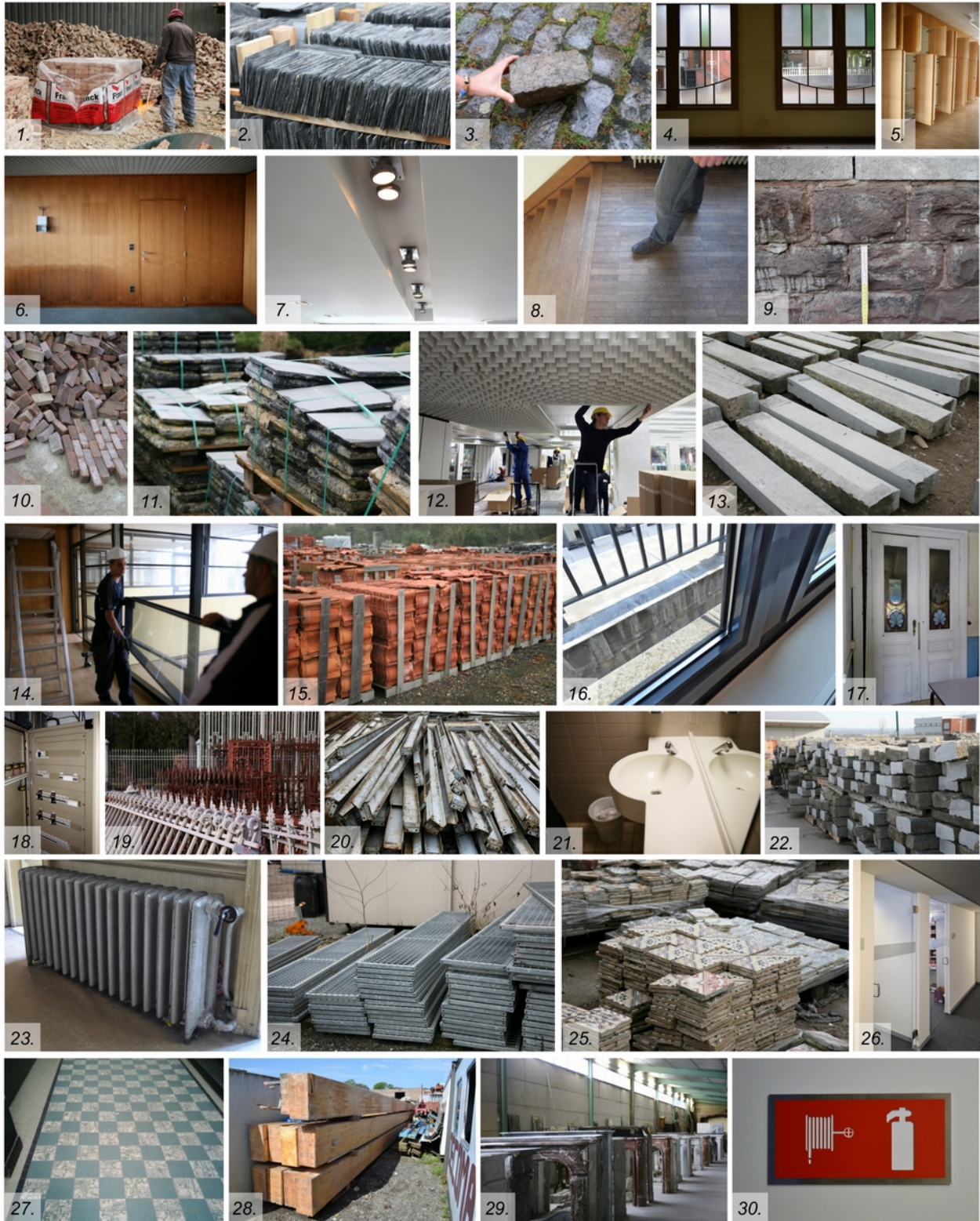
- Is the material easy to disassemble?
- Does it have any particular heritage value?
- Is it easy to transport and store?
- Could the disassembly be more expensive than buying a new equivalent product?
- Will I use it myself if I have a development project?

You could also refer to the materials most frequently found on the reuse circuit. You will find some illustrations of these on the following page.

If in doubt, please contact **the associations specializing in the reuse of building materials** in Belgium, such as:

- [Rotor asbl](#), 58 Rue Prévinaire – 1070 Brussels / info@rotordb.org
- [Ressources asbl](#), Mundo N, 98 rue Nanon – 5000 Namur / info@res-sources.be

They can help you make this initial evaluation.

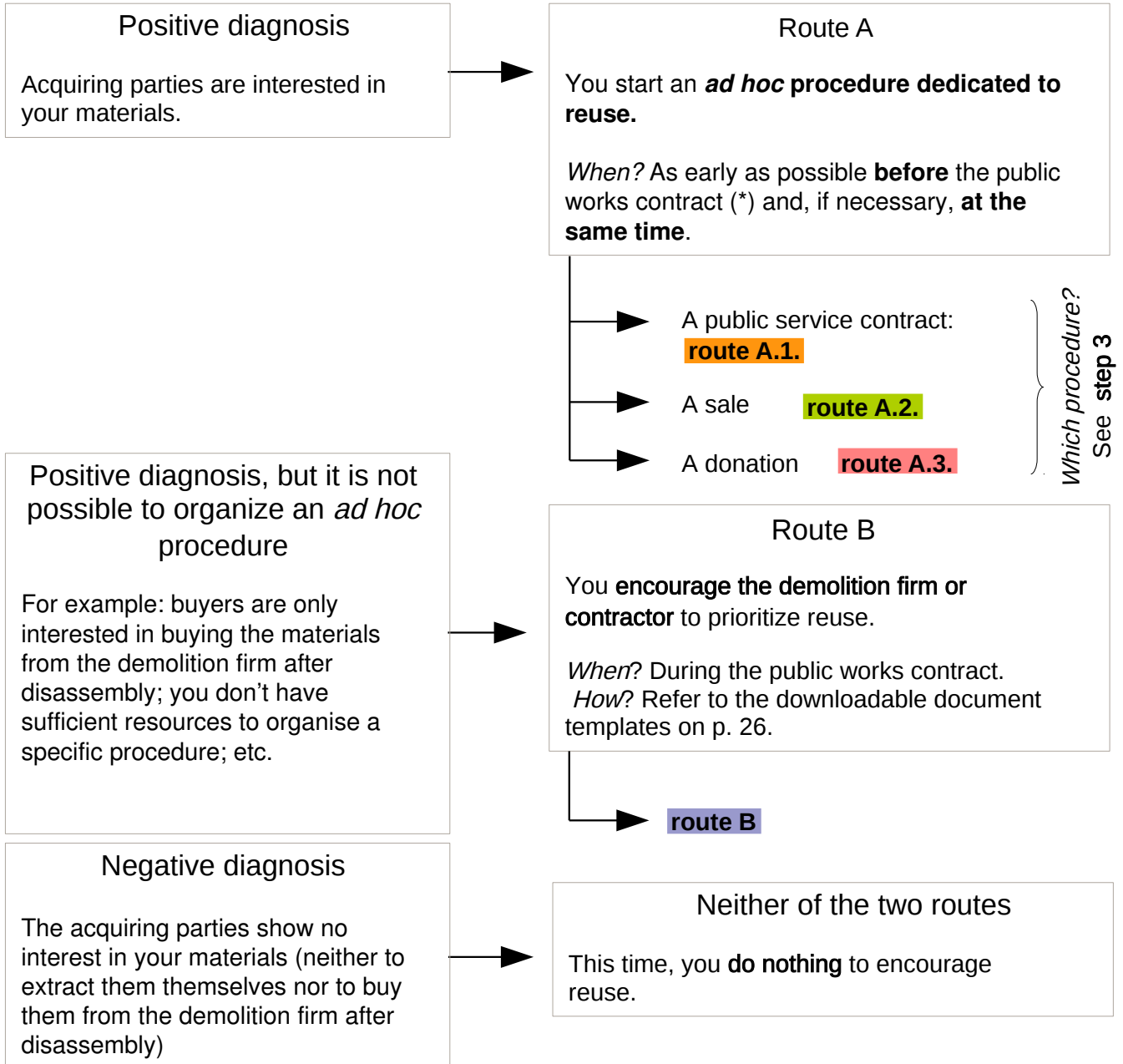


Some examples of reusable materials:

1. Solid bricks, packaged for reuse; 2. Slate; 3. Paving stones; 4. Window frames; 5. Modern built-in wardrobes; 6. Panelling in a 70's office; 7. Contemporary light fittings; 8. Parquet flooring; 9. Stone rubble; 10. Terra cotta clinker; 11. Stone floor; 12. Alveolar suspended ceiling, disassembled for reuse; 13. Bluestone window sills; 14. Modular partitioning, disassembled for reuse; 15. Tiles; 16. Recent double glazing; 17. Old door; 18. Electrical panel; 19. Ironwork; 20. Steel sections; 21. Sanitation facilities; 22. Kerbs; 23. Cast iron radiator; 24. Metal framework; 25. Early 20th century tiles; 26. Glass doors; 27. Ceramic tile floors from the 1950's; 28. Glulam beams; 29. Marble or stone chimneys; 30. Signage.

Step 2: Getting involved at the right level (route A, route B or no route)

Au terme du diagnostic posé à l'étape 1, vous êtes confronté à trois cas de figure, desquels découlent trois attitudes possibles.



If possible, the ad hoc procedure dedicated to reuse (routes A.1., A.2., A.3.) is launched and implemented as early as possible before the public works contract. When the advance extraction of the materials is not possible (for example: the building is occupied until the start of work; you need to remove a staircase providing access to the floors during the work, etc.), the reuse procedure can be implemented (wholly or partially) at the same time as the public works contract. In this case, you make the demolition firm or the contractor for the public works contract responsible for coordinating with the successful bidder for the ad hoc procedure dedicated to reuse.

Step 3: Choosing between the public service contract, sale or donation (route A1., route A.2. or route A.3.)

Your materials attract the interest of the market. You start a public service contract (**route A.1.**), a sale (**route A.2.**) or a donation (**route A.3.**) as early as possible before the public works contract to enable the maximum amount of materials to join the reuse sector.)

Which procedure should you choose?

Public service contract

route A.1. - *by default and the most frequent*

The operation principally concerns the disassembly and removal of the materials

Checklist :

- ✓ Non-incident handling (*); and/or
- ✓ Low- or medium-value materials; and/or
- ✓ Sum of money paid by the contractor to the acquiring party

Examples : recovering old tiles from the roof of a warehouse; removing the stone cladding of a façade, a high suspended ceiling, etc.

It is advisable to assign the recovery of the materials to a single acquiring party or a temporary association of acquiring parties.

Sale or donation

routes A.2. & **A.3.** - *less common but more simple*

The materials are the main purpose of the operation. The handling required to extract them is only incidental (*).

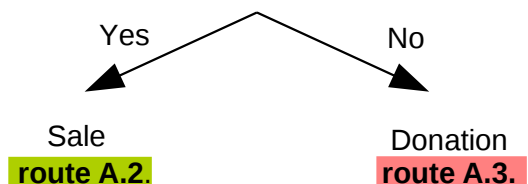
Checklist :

- ✓ Incidental handling (*); and
- ✓ High-value materials; and
- ✓ Nothing paid by the contractor to the acquiring party

Examples : disassemble a historic chandelier, a marble mantel piece, an old door, a handrail signed by a famous designer, etc.

It is advisable to have as many acquiring parties as there are categories in the inventory.

Would you like to be paid for the materials?



(*) The handling is incidental when the operation is part of a move: (i) the material is accessible at head height or using a small ladder, (ii) it can be removed using light tools (iii) the disassembly areas are safe.

Good to know ...



Recovering structural materials

When the materials to be recovered are structural (e.g. load-bearing masonry, framework) and the disassembly of which is part of the "demolition work", it is necessary to agree a public works contract rather than a public service contract.

see law of 15 June 2006 on public contracts and certain works, supply and service contracts, annex I, class 45.11.



Other award systems and criteria

You can always choose to award the public service, sale or donation contract in accordance with other systems or criteria (e.g. you agree a public contract in batches, you conclude a sale with a sole operator for the whole inventory, etc.).

In this case, you adapt to the margin of the document templates attached to the Handbook.

The public service contract.

In the case of a public service contract (see box)⁴, you are advised to assign the extraction of the materials to a single buyer. You grant the contract to the tenderer who undertakes to extract the broadest range of materials identified in the inventory (see: **Awarding the public service contract**).

The price is not an award criterion: It is defined on the basis of the sums you have defined in advance (see: **Setting the maximum price of the public service contract in advance**).

Sale or donation

However, in the case of a sale⁵ or donation⁶, it is advisable to ensure that each category of the inventory corresponds to a separate sale or donation. There will then be as many potential acquiring parties as there are categories in the inventory.

In the case of a **sale**, you assign each category of the inventory to the person offering you the best price to remove it. A sale enables you to generate income by transferring the materials to the highest bidder. In this way, you make direct savings on the budget allocated to your project.

In the case of a **donation**, you assign each category to the person who offers to remove, free of charge, the greatest quantity of the materials identified. A donation can be an opportunity to support a social or similar organization (for example: a social economy enterprise).

Disassembly of materials by a professional player

Whether using a public service contract, a sale or a donation, it is advisable to assign the disassembly to a professional player, which is defined as:

4 A public service contract is defined negatively as a contract that does not cover the work or the supply, but only the services identified in annex II of the law of 15 June 2006. The notion of "service" covers the services provided for payment, regardless of their nature, duration or frequency (see law of 15 June 2006 on public contracts and some works, supply and service contracts, art. 3, 4°; S. Ben Messaoud and F. Viseur, « Le champ d'application personnel et matériel de la nouvelle loi sur les marchés publics », Public contracts, Brussels, Larcier, 2014, p. 117).

5 A sale is a contract under which one party (the vendor) is required to transfer the ownership of an item to another party (the buyer), for a monetary price that the latter undertakes to pay (see article 1582 of the Civil Code).

6 A donation is a contract by which one person (the donor) immediately and irrevocably relinquishes a given item in favour of another person (the beneficiary) who accepts it (see article 894 of the Civil Code).

- Either an entity that performs a regulated building activity in Belgium or in another European Union Member State;
- Or an entity that has performed at least 2 services involving the disassembly and removal of building materials with a view to their reuse during the last 3 years, regardless of their size or complexity.

In practice, the following are referred to by this definition: building and demolition contractors, professional dealers of reusable materials, or social economy enterprises.

Questions specific to the public service contract

- Awarding the public service contract

It is advisable to award the public service contract on the basis of the two award criteria, which are: (1) the quantity of materials recovered and (2) the diversity of the categories removed.

In practice, when preparing the contract you assess the mass of each category of materials in the inventory attached to the special specifications. During the comparison of the tenders, you give each tender point score based on the following formula:

$$\text{Number of points of a tender} = \left(\frac{M(\text{tender})}{M(\text{total})} * 100 \right) + \text{bonus}$$

where :

- “*M(tender)*” corresponds to the total mass of materials that the tenderer undertakes to extract in their tender;
- “*M(total)*” corresponds to the total mass of materials in the inventory; and
- “*bonus*”: 5 to 10 extra points are awarded to tenders that cover 50% of the materials listed in half or 3/4 of categories in the inventory.
-

You award the contract to the tender that receives the most points.

- Paying for reuse?

It is advisable to agree a public service contract, establishing the maximum price in advance to meet your priorities.

Tools

The special specifications for the public service contract set out the method to follow to award the contract in detail (annex A.1.1., art. 5).

In addition, a model comparison of tenders table is provided in annex A.1.9. It is supported by an example (see: sheet 2).



0 Euro contract & negative price contract

If you are sure that the value of your materials is high enough, you can also choose: (1) to pay the successful tenderer for the public service contract in kind only, by the ownership of the materials or (2) to receive money from the successful tendering party in exchange for the materials. These will be referred to respectively as a “zero Euro” contract or a “negative price” contract.

See C. Dubois and I. Van Kruchten, « La notion de titre onéreux. Essai d'analyse du parent pauvre de la définition du marché public », Chronique des marchés publics 2009-2010, Bruxelles, EBP, 2010, pp. 232-234.

For example, you set the maximum price of the public service contract at a price lower than the cost of a destructive demolition of the materials and their removal as waste. In this way, you pay the operator a monetary price in addition to the ownership of the materials, which is often insufficient on its own, to compensate for the disassembly and removal of the materials. At the same time, you ensure that the contract for reuse will not cost you more than what you would have paid anyway to remove the materials in a destructive process (see below).

Setting the maximum price of the public service contract in advance

Ratio

Setting the maximum price of the public service contract when preparing the contract makes it possible to:

- simplify the awarding of the contract, which is done without referring to a price criterion;
- ensure that the price of the contract will not exceed a certain limit in line with your priorities.

At the time of preparing the contract, you set the maximum price of the contract in the inventory that is attached to the special specifications. At the time of awarding the contract, you calculate the real price of the contract by multiplying, for each category, the maximum price you have fixed in advance to remove this category by the quantity of materials that the applicant who submitted the best tender has undertaken to extract.

You rely on **your own references and experience to set the maximum price of the contract**. You can also refer to the approximate **cost of a traditional destructive demolition** of the reusable materials listed in the inventory, including removal. This is a cost you would have to cover if not reusing the materials off site. It therefore constitutes an objective point of comparison for you to use. You then set the maximum price of the public service contract at a level equal to, lower than or higher than the cost of the destructive demolition in line with your objectives and priorities.

The cost of a destructive demolition

1. Tools

You can ask your **architect** to estimate the cost of a destructive demolition of the materials by referring to a price schedule and in relation to his own experience of demolition sites.

You can estimate this price **yourself** using the downloadable simplified pricing table in [annex A.1.3](#). This table contains the average prices notified by the 2014 schedule of unit prices (SUP) for the destructive demolition of materials.

2. An absolute threshold not to be exceeded or an objective indicator?! ... Everything depends on your objectives and your priorities!

Your objective is to ensure that the public service contract for reuse will always be of **equal or lower cost than that of a destructive demolition** of these elements. → In this case, you make sure to set the price of the contract at an amount equal to or lower than the estimated cost of the demolition in the public works contract.

Your objective is to **manage the recovered resources more efficiently** than at present, without the cost of the destructive demolition being an absolute threshold that must not be exceeded. For example, the extraction of reusable materials will always appear more worthwhile in your eyes compared to the alternative of landfill, even though reuse might cost 10% more per m². → In this case, you refer to the cost of the traditional destructive demolition as one objective point of comparison among others to fix the budget you allocate to the public service contract for reuse.

Step 4: Implementing the chosen strategy

Briefly

You put into practice the strategy used for steps 1 to 3 on the basis of the downloadable document templates below:

- In the case of a public service contract, see: Summary of route A.1. : Public Service Contract;
- in case of a sale, see: Summary of route A.2. : Sale;
- in case of a **donation**, see : Summary of route A.3. : Donation;
- for the **best efforts obligation**, see: Summary of route B: Best efforts obligation.

The key tools in all cases

The inventory of potentially reusable materials

Prepared by the contracting authority, the architect or a third party, the inventory is the central tool to any reuse strategy:

- it enables you to identify the potentially reusable materials present in a building and convey information about them; and
- it enables acquiring parties to undertake in their tender to extract a specific type and quantity of materials.

What materials should be listed in the inventory? How can we define a category in the inventory? How much detail should be included in the description of a category? What visual appearance should be reserved for the inventory?

To answer these crucial practical questions, consult annex 3 “How is an inventory of potentially reusable materials prepared?”

There are several possible ways to prepare an inventory: yourselves, via your architect or via a third party.

→ see [Annex 1 : Inventory template](#).

→ see [Annex 2 : Example inventory](#).

→ see [Annex 4 : Model clauses:making the project developer responsible for compiling the inventory](#).

Nota bene : There is still time to make your architect responsible for preparing the inventory after the public contract for the selection of the project developer has been awarded / started, via a supplementary clause or an amending order (→ see [Annex 4](#)).

The recovery summary

The recovery summary is submitted to the contracting authority by the acquiring party on completion of the execution of the contract to take account of the materials extracted during the reuse operation.

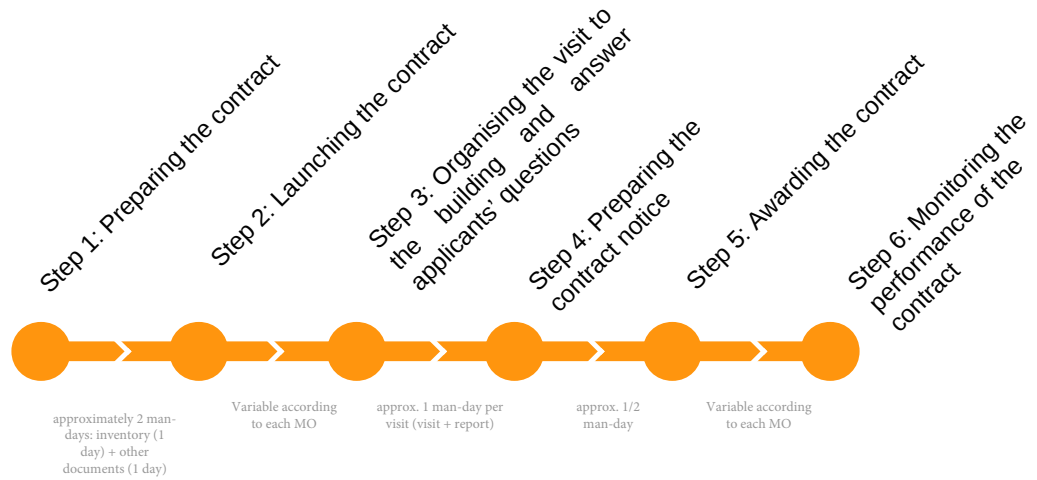
It is an essential monitoring tool for the contracting authority. That is why you demand the prior handover of the recovery summary by the successful bidder before paying the final part of the contract price (in the case of a public service contract (route A.1.) and of the best efforts obligation (route B)). The recovery summary is also a very useful tool for conveying information internally and externally regarding the quantities of materials extracted.

→ see [Annex 5: Recovery summary](#).

In your communications based on the information contained in the recovery summary, it is often more revealing to express the quantities of materials extracted in tonnes (rather than kg).

Remark: not all the annexes have been translated into English. Original documents in Dutch and French can be found in these version of the handbook. See <http://opalis.eu>

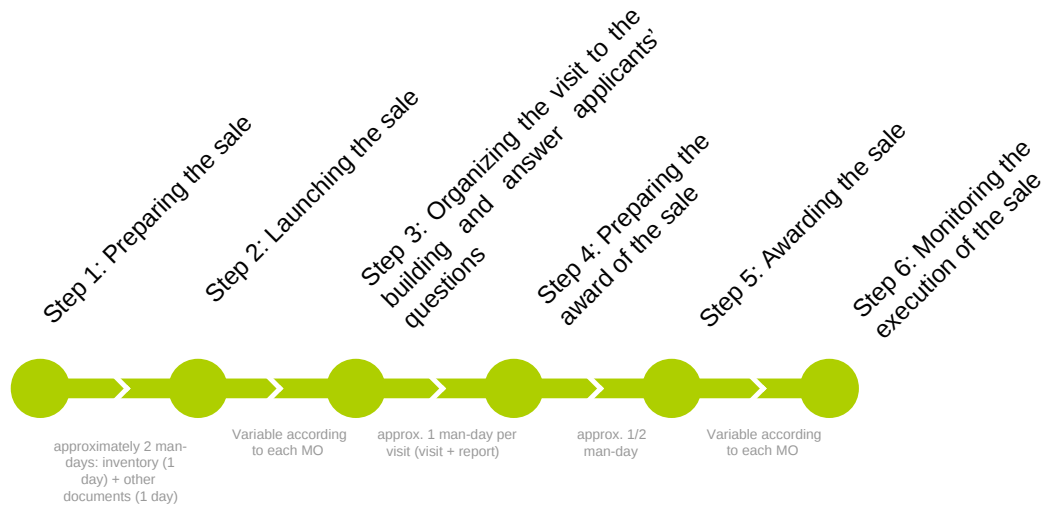
Summary of route A.1. : Public service contract








Step 1: Preparing the contract																			
a) A. Compile an inventory																			
→ Yourselves	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%; text-align: center;">1</td> <td style="width: 75%;">Inventory to be completed</td> <td style="width: 20%; text-align: right;"></td> </tr> <tr> <td style="text-align: center;">2</td> <td>Example of a completed inventory ready to be released</td> <td style="text-align: right;"></td> </tr> <tr> <td style="text-align: center;">3</td> <td>How do you compile an inventory?</td> <td style="text-align: right;"></td> </tr> <tr> <td colspan="3">A.1.2. How do you calculate the mass of the materials?</td> </tr> </table>	1	Inventory to be completed		2	Example of a completed inventory ready to be released		3	How do you compile an inventory?		A.1.2. How do you calculate the mass of the materials?								
1	Inventory to be completed																		
2	Example of a completed inventory ready to be released																		
3	How do you compile an inventory?																		
A.1.2. How do you calculate the mass of the materials?																			
→ Or by the project developer	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%; text-align: center;">4</td> <td style="width: 75%;">Make the project developer responsible for compiling the inventory</td> <td style="width: 20%; text-align: right;"></td> </tr> </table>	4	Make the project developer responsible for compiling the inventory																
4	Make the project developer responsible for compiling the inventory																		
b) B. Coordinate the public service contract with the public works contract	A.01. Coordinate the public service contract with the public works contract																		
c) Prepare the special specifications and annexes	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="3">A.1.1. Special specifications for the public service contract</td> </tr> <tr> <td colspan="3">A.1.3. Simplified pricing table</td> </tr> <tr> <td style="width: 5%; text-align: center;">1</td> <td style="width: 75%;">Inventory of potentially reusable materials</td> <td style="width: 20%; text-align: right;"></td> </tr> <tr> <td colspan="3">A.1.4. Tender Form</td> </tr> <tr> <td style="text-align: center;">6</td> <td>Liability Waiver</td> <td></td> </tr> <tr> <td style="text-align: center;">5</td> <td>Recovery Summary</td> <td></td> </tr> </table>	A.1.1. Special specifications for the public service contract			A.1.3. Simplified pricing table			1	Inventory of potentially reusable materials		A.1.4. Tender Form			6	Liability Waiver		5	Recovery Summary	
A.1.1. Special specifications for the public service contract																			
A.1.3. Simplified pricing table																			
1	Inventory of potentially reusable materials																		
A.1.4. Tender Form																			
6	Liability Waiver																		
5	Recovery Summary																		
d) Prepare the decision setting the terms and conditions of the contract	A.1.5. Decision fixing the terms and conditions of the public service contract																		
e) Prepare the contract notice																			
→ In the case of a negotiated procedure without publication	A.1.6. Simplified contract notice																		

→ In case of a direct negotiated procedure with publication	A.1.7. Contract notice
Step 2: Launching the contract	
a) Submit the documents prepared in step 1 for the approval of the competent body	
b) Publish: (1) the contract notice, (2) the special specifications (SS) and (3) the annexes to the SS.	
Step 3: Organising the visit to the building and answer applicants' questions	
a) Have a liability waiver signed by the visitors before the start of the visit	6 Liability waiver
b) Organize at least 2 visits and a question+answer session after each visit	
c) Send a report to all applicants who have expressed an interest in the contract.	7 Report of visits and question + answer session
Step 4: Preparing the contract notice	
a) Receive the tenders	A.02. Tender opening report
b) Compare the tenders	A.1.8. Reasoned report of the awarding of the public service contract
	A.1.9. Comparison of tenders table
c) Prepare the reasoned report of the awarding of the contract	A.1.10. Reasoned decision to award the public service contract
d) Prepare the cover letter for the attention of the applicants	A.1.11. Cover letter
Step 5: Awarding the contract	
a) Submit the documents prepared in step 4 for the approval of the competent body	
b) Send to all applicants who have submitted a tender: (1) the cover letter, (2) the reasoned decision to award the contract and (3) the reasoned report of the comparison of tenders	
Step 6: Monitoring the performance of the contract	
a) Check that, <u>no more than ten (10) calendar days after the notification date of the reasoned decision to award the public service contract: the successful applicant submits proof of having professional civil liability insurance.</u>	
b) Check that the successful applicant submits a recovery summary <u>no more than 30 days after the end of the disassembly period.</u>	
c) In the event of failure to perform the contract, apply the sanctions set out in the special specifications.	

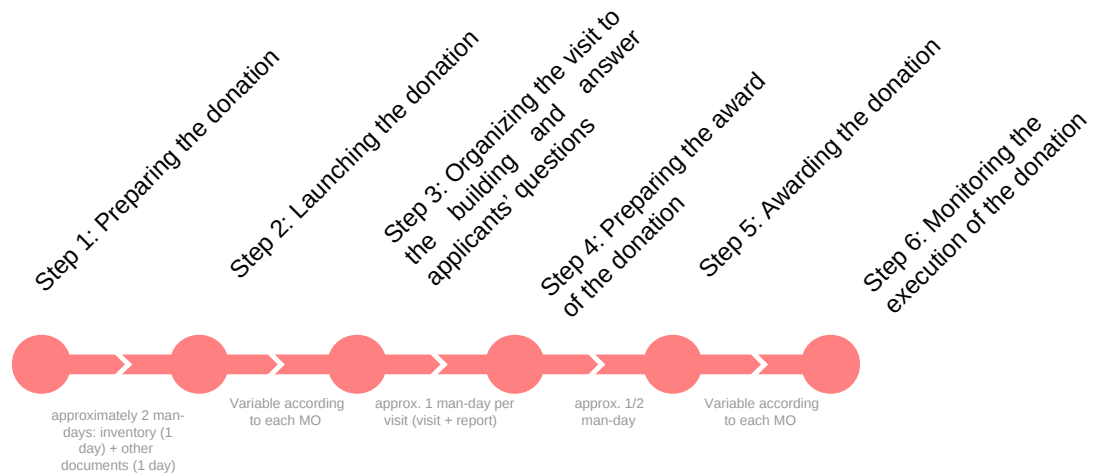
Summary of route A.2. : Sale



Step 1: Preparing the sale	
a) A. Compile an inventory	
→ <i>Yourselves</i>	<p>1 Inventory to be completed </p> <p>2 Example of a completed inventory ready to be released </p> <p>3 How do you compile an inventory? </p>
→ <i>Or by the project developer</i>	<p>4 Make the project developer responsible for compiling the inventory </p>
b) Coordinate the sale with the public works contract	A.01. Coordinate the sale with the public works contract
c) Prepare the sale notice	A.2.1. Sale notice
d) Prepare the tender form and the draft sale contract	A.2.2. Tender form and draft sale contract
e) Prepare the decision setting the terms and conditions of the sale	A.2.3. Decision setting the terms and conditions of the sale
Step 2: Launching the sale	
a) Submit the documents prepared in step 1 for the approval of the competent body	
b) Publish the sale notice and its annexes	<p>A.2.1. Sale notice</p> <p>1 Inventory of potentially reusable materials </p> <p>A.2.2. Tender form and draft sale contract</p> <p>6 Liability waiver</p> <p>5 Recovery summary</p>
Step 3: Organizing the visit to the building and answer applicants' questions	

a) Have a liability waiver signed by the visitors before the start of the visit.	6 Liability waiver
b) Organise at least 2 visits and a question & answer session after each visit	
c) Send a report to all applicants who have expressed an interest in the sale.	7 Report of visits and question & answer session
Step 4: Preparing the award of the sale	
a) Receive the tenders	A.02. Tender opening report
b) Compare the tenders	A.2.4. Reasoned report of the award of the sale
c) Prepare the reasoned decision to award the sale	A.2.5. Reasoned decision to award the sale
d) Prepare the cover letter for the attention of the applicants	A.2.6. Cover Letter
Step 5: Awarding the sale	
a) Submit the documents prepared in step 4 for the approval of the competent body	
b) Send to all applicants who have submitted a tender: (1) the cover letter, (2) the reasoned decision to award the sale and (3) the reasoned report of the comparison of tenders	
c) Sign a sale contract with the chosen buyer, in two original copies	
Step 6: Monitoring the execution of the sale	
a) VCheck that, <u>no more than ten (10) calendar days after the notification date of the reasoned decision to award the sale:</u> – the buyer has paid the sale price; and – The buyer has sent proof that the materials will be removed by a professional operator, and proof that the operator has taken out professional civil liability insurance.	
b) Check that the buyer submits a recovery summary <u>no more than 30 days after the end of the disassembly period.</u>	
c) In the event of failure to execute the sale, apply the measures set out in the sale contract.	

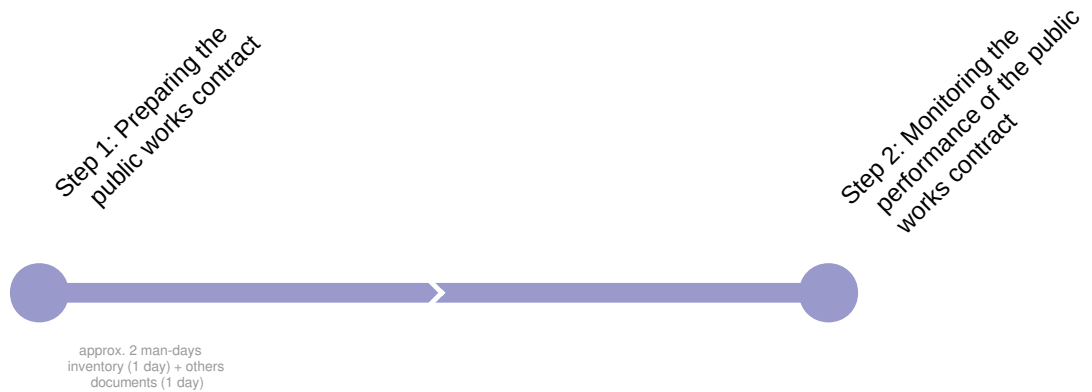
Summary of route A.3. : Donation



Step 1: Preparing the donation	
a) Compile an inventory	
→ <i>Yourselves</i>	1 Inventory to be completed
	2 Example of a completed inventory ready to be released
	3 How do you compile an inventory?
→ <i>Or by the project developer</i>	4 Make the project developer responsible for compiling the inventory
b) Coordinate the donation with the public works contract	A.01. Coordinate the donation with the public works contract
c) Prepare the donation notice	A.3.1. Donation notice
d) Prepare the tender form and the draft donation contract	A.3.2. Tender form and draft donation contract
e) Prepare the decision setting the terms and conditions of the donation	A.3.3. Decision setting the terms and conditions of the donation
Step 2: Launching the donation	
a) Submit the documents prepared in step 1 for the approval of the competent body	
b) Publish the donation notice and its annexes	A.3.1. Donation notice
	1 Inventory of potentially reusable materials
	A.3.2. Tender form and draft donation contract
	6 Liability waiver
	5 Recovery summary

Step 3: Organising the visit to the building and answer applicants' questions	
a) Have a liability waiver signed by the visitors before the start of the visit	6 Liability waiver
b) Organize at least 2 visits and a question+answer session after each visit	
c) Send a report to all applicants who have expressed an interest in the donation	7 Report of visits and question & answer session
Step 4: Preparing the award of the donation	
a) Receive the tenders	A.02. Tender opening report
b) Compare the tenders	A.3.4. Reasoned report of the award of the donation
c) Prepare the reasoned decision to award the donation	A.3.5. Reasoned decision to award the donation
d) Prepare the cover letter for the attention of the applicants	A.3.6. Cover Letter
Step 5: Awarding the donation	
a) Submit the documents prepared in step 4 for the approval of the competent body	
b) Send to all applicants who have submitted a tender: (1) the cover letter, (2) the reasoned decision to award the donation and (3) the reasoned report of the comparison of tenders	
c) Sign a donation contract with each chosen beneficiary, in two original copies	
Step 6: Monitoring the execution of the donation	
a) Check that, <u>no more than ten (10) days after the notification date of the reasoned decision to award the donation</u> , the beneficiary sends proof that the materials will be removed by a professional operator, and proof that the operator has taken out professional civil liability insurance.	
b) Check that the beneficiary submits a completed recovery summary <u>no more than 30 days after the end of the disassembly period.</u>	
c) In the event of failure to execute the donation, apply the measures set out in the donation contract.	

Summary of route B: Best efforts obligation



Step 1: Preparing the public works contract										
a) Compile an inventory										
→ <i>Yourselves</i>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 5%;">1</td> <td style="width: 70%;">Inventory to be completed</td> <td style="text-align: right; width: 25%;"></td> </tr> <tr> <td style="text-align: center;">2</td> <td>Example of a completed inventory ready to be released</td> <td style="text-align: right;"></td> </tr> <tr> <td style="text-align: center;">3</td> <td>How do you compile an inventory?</td> <td style="text-align: right;"></td> </tr> </table>	1	Inventory to be completed		2	Example of a completed inventory ready to be released		3	How do you compile an inventory?	
1	Inventory to be completed									
2	Example of a completed inventory ready to be released									
3	How do you compile an inventory?									
→ <i>Or by the project developer</i>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 5%;">4</td> <td style="width: 70%;">Make the project developer responsible for compiling the inventory</td> <td style="text-align: right; width: 25%;"></td> </tr> </table>	4	Make the project developer responsible for compiling the inventory							
4	Make the project developer responsible for compiling the inventory									
b) Introduce a best efforts obligation to prioritize reuse off site	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 5%;">B.01.</td> <td style="width: 70%;">Impose a best efforts obligation on the demolition firm or contractor to prioritize reuse off site during the public works contract</td> <td style="width: 25%;"></td> </tr> <tr> <td style="text-align: center;">5</td> <td>Recovery summary</td> <td></td> </tr> </table>	B.01.	Impose a best efforts obligation on the demolition firm or contractor to prioritize reuse off site during the public works contract		5	Recovery summary				
B.01.	Impose a best efforts obligation on the demolition firm or contractor to prioritize reuse off site during the public works contract									
5	Recovery summary									
Step 2: Monitoring the performance of the public works contract										
<p>Pay the final part of the contract price only if the demolition firm / contractor submits a completed recovery summary <u>no more than 30 days after the end of the disassembly period</u> (annex B.01, model clauses nos. 2 and 4).</p>										



Has the public works contract already been awarded or already started being executed? It's time to act! You impose the best efforts obligation to prioritise reuse on the demolition firm or the contractor, via a supplementary clause to the public works contract or via an amending order .

Discussion: A public service contract disorganize by negotiated procedure (route A.1.)

You organize the public service contract by negotiated procedure so as to enable **negotiations** after the submission of tenders.



What are the negotiations about? Whatever type of negotiated procedure is selected, the negotiations exclusively concern the content of the **tenders**. They do not concern the special specifications, the award criteria, nor any element that could have influenced the preparation of the tenders or that could have had a discriminatory effect vis-à-vis one of the tendering parties (*see, among others, C.E., 23 December 2014, no. 229.699, Alstom et al.*)

Contract below € 85,000: a negotiated procedure without publication



You can use the **negotiated procedure without publication** due to the low amount of the contract only if the actual amount of the contract (i.e. the final amount of the successful tender or “the expenditure to be approved for the contract considered at the time it is awarded”) is lower than € 85,000 excl. VAT (see law of 15 June 2006 on public contracts and certain works, supply and service contracts, art. 26, §1, 1°, a); Royal Decree of 15 July 2011 on the award of public contracts in the traditional sectors, art. 105, §1, 2° and report to the King.

If the actual amount of the contract is greater than € 85,000 excl. VAT, it is advisable to award the contract using the **direct negotiated procedure with publication** (→ see below: **Contract between € 85,000 and € 207,000: a direct negotiated procedure with publication**).

The final amount of the tender selected within the framework of the public service contract dedicated to reuse is below € 85,000 excl. VAT

In this case, you opt for a negotiated **procedure without publication**. You refer to your usual practices in the matter. For example:

- You complete the document templates provided on p. 20 of the Handbook. A justification of the choice of negotiated procedure without publication on the basis of the low amount of the contract already features: (a) in the decision setting the terms and conditions of the procedure and (b) in the special specifications.
- You send the special specifications and the inventory of potentially reusable materials (annex 1) directly to the companies of your choice (at least 3), without publishing a contract notice; or
- If you do not know enough companies, you publish (1) a simplified contract notice, (2) the special specifications and (3) the inventory on your own website, on the website opalis.be (contact: info@opalis.be) and via any other pertinent channel (e.g.: local newspaper, posters, email / telephone calls to potential acquiring parties, etc.).
- You check that all the information disclosed during the (possible) exploration phase is shown in the simplified contract notice or the documents annexed to it (→ **Step 1: Diagnosis – testing market interest**).
- You arrange enough time between the publication date of the simplified contract notice and the deadline for receiving tenders to allow tendering parties to prepare their tender. It is advisable to allow at least

- (a) a period of 15 calendar days** between the publication of the simplified contract notice and the first visit to the building and
- (b) a period of 5 working days** between the last visit and the deadline for receiving tenders.



A public contract surrounded by ad hoc publication measures is a contract awarded according to a negotiated procedure “without publication” within the meaning of the legislation on public contracts

Even if you publish a simplified contract notice on your website, on the opalis.be website (contact : info@opalis.be) or via other ad hoc channels before the deadline for receiving tenders, the procedure is still a negotiated procedure “without publication” within the meaning of the legislation on public contracts, provided this **procedure is not surrounded by publication** measures stipulated by said legislation (i.e. in particular: the publication of a previous contract notice in the Bulletin des adjudications for contracts subject to Belgian publication and, in addition, in the Official Journal of the European Union for contracts subject to European publication).

See law of 15 June 2006 on public contracts and certain works, supply and service contracts, art. 3, 7° and 8°; Royal Decree of 15 July 2011 on the award of public contracts in the traditional sectors, art. 29 to 41 and 105-110.



Is the final amount of the contract below € 8,500 excl. VAT? You can award the contract using a negotiated procedure without publication “certified by an agreed invoice”

When the final amount of the tender selected is below € 8,500 excl. VAT, you can opt for a negotiated procedure without publication “certified by an agreed invoice”. You refer to your usual practices in the matter. For example:

- You prepare the contract in a minimal way: you only prepare an inventory of potentially reusable materials, without referring to special specifications or publishing a contract notice.
- You send the inventory to the companies of your choice (at least 3), asking them to send you an estimate for disassembling and removing a maximum quantity of materials; or
If you do not know enough companies, you publish a simplified contract notice and an inventory (without special specifications) on your own website, on the website opalis.be (contact: info@opalis.be) and via any other pertinent channel (e.g.: local newspaper, posters, email / telephone calls to potential buyers, etc.).
- You conclude the contract by accepting the invoice of the operator who submits the most economically favorable estimate.

See law of 15 June 2006 on public contracts and certain works, supply and service contracts, art. 26, §1, 1°, a); Royal Decree of 15 July 2011 on the award of public contracts in the traditional sectors, art. 105, §1, 4°; art. 106, §1, para. 2; art. 110, para. 2.



The value of the materials is an integral part of the total value of the contract!

When the intrinsic value of the materials is high (for example: materials with a special history or heritage, elements signed by a famous artist or designer, expensive fittings, etc.), do not forget to include the estimate of the value of these materials when you calculate the total value of the contract to identify the applicable publicity thresholds.

See Royal Decree of 15 July 2011 on the award of public contracts in the traditional sectors, art. 24 to 28.

Contract between 85,000 and 207,000: a direct negotiated procedure with publication



The direct negotiated procedure with publication is only available if the estimated amount of the contract (i.e. the amount of the contract as evaluated at the time of initiating the procedure) is below € 207,000 excl. VAT.

If the estimated amount of the contract is greater than € 207,000 excl. VAT, you award the contract using one of the contract modes with European publication provided for by the legislation on public contracts (award of contract, call for tenders, negotiated procedure with European publication, etc.).

See Royal Decree of 15 July 2011 on the award of public contracts in the traditional sectors, art. 29 to 38; 42-47, spec. art. 32, para. 1, 3°.

The final amount of the tender selected within the framework of the public service contract dedicated to reuse is equal to or over € 85,000 excl. VAT and the estimated amount of the contract is below € 207,000 excl. VAT

In this case, you opt for a direct negotiated **procedure with publication**. You refer to your usual practices in the matter. For example:

- You complete the document templates provided on p. 20 of the Handbook. A justification of the choice of the direct negotiated procedure with publication already features: (a) in the decision setting the terms and conditions of the procedure and (b) in the special specifications;
- You publish a contract notice in the Bulletin des Adjudications (publication of public contract notices). You check that all the information disclosed during the (possible) exploration phase is shown in the contract notice or the documents annexed to it (see **Step 1: Diagnosis – testing market interest**);
- Between the publication of the contract notice in the Bulletin des Adjudications and the deadline for receiving tenders, you observe a publication period of 30 calendar days⁷;
- After the contract notice has been published in the Bulletin des Adjudications, you publish (1) a copy of it, accompanied by (2) the special specifications and (3) its annexes on your own website, on the website opalis.be (contact: info@opalis.be) and via any other pertinent channel (e.g.: local newspaper, posters, email / telephone calls to potential acquiring parties, etc.). These publications cannot contain additional information beyond that contained in the contract notice published in the Bulletin des Adjudications.

⁷ Articles 42, para. 3, 1° and art. 48, para. 2, of the Royal Decree of 15 July 2011 on the award of public contracts in the traditional sectors impose: (i) compliance with a minimum period of **22 calendar days** between the publication of the contract notice and the deadline for receiving tenders for the award of a contract by direct negotiated procedure with publication and (ii) the **extension of this period** when the tenders can only be prepared after a visit to the premises, as is the case here. It is therefore proposed to set a total period of **30 calendar days** (22 days minimum + 8 days extension).

Discussion (continued): A minimum of red tape in case of a sale (route A.2.) or a donation (route A.3.)

Publication measures

You freely opt for the publication procedure that you consider best suited to the size of the sale / donation, to your practice and that of the sector. It is always advisable to publish a sale / donation notice (1) on your own website, (2) on the opalis.be website (contact: info@opalis.be) and (3) via any other pertinent channel (e.g.: local newspaper, posters, email / telephone calls to potential acquiring parties, etc.).



In the case of a **sale**, you can also publish a simplified sale notice in the Free Market environment of the e-notification application:

<https://enot.publicprocurement.be/>
(see standard form 56: "simplified contract notice for a sale").

Deadline for submission of tenders

You arrange enough time between the publication date of the sale / donation notice and the deadline for receiving tenders to allow tendering parties to prepare their tender. It is advisable to allow at least (a) a period of **15 calendar days** between the publication of the sale / donation notice and the first visit to the building and (b) a period of **5 working days** between the last visit and the deadline for receiving tenders.

Supporting documents

The applicants provide the documents confirming that the disassembly and removal will be carried out by a professional operator only after the award of the sale or donation, if their tender had the highest rating (and not at the time of submitting the offer).

About the Handbook

This document was produced by Rotor asbl: Sophie Seys, Lionel Billiet, Maarten Gielen and Michaël Ghyoot, with the occasional input of Renaud Haerlingen, Tristan Boniver and Lionel Devlieger.

A big thank you to those who contributed to this work through their experience and valuable feedback: Christophe Bourgois, Karim Boulmaïz and Davy Fiankan (Commune d'Anderlecht), Marc Limaugue (Aremat sprl), Susanne Breuer (bMa, team of the Master Architect for the Brussels Region), Nicolas Scherrier and Céline Schaar (Bruxelles-Environnement), Vincent Hofmans and Olivier Alexandre (CityDev), Céline De Schryver (Construction Confederation), Peter Janssens and Gaëlle Guyomarc'h (Brussels CPAS), Jan Franck (Franck bvba), Pierre Lhoas (Lhoas & Lhoas architects), Alice Penet (CDR Construction), François Tulkens, Vincent Ost and Maxime Vanderstraeten (NautaDutilh law firm), Jean-François Kleykens (RenovaS asbl), Benoît Janssens and Christine Coradossi (Ressources asbl), Marguerite Van Overbeke (Commune de Schaerbeek).

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