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D1.9: Guidelines to tendering process specification

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Table of Content

0	Abstract.....	9
1	Introduction	11
1.1	Purpose	13
1.2	How to use this guide and who is it for.....	13
1.3	Integration in the URBAN GreenUP Methodology.....	14
2	Implementing NBS in the cities.....	16
2.1	Mechanisms for implementing NBS in a city	16
2.1.1	Public procurement.....	17
2.1.2	Business as usual works	17
2.1.3	Public-private collaborations	18
2.2	Stakeholders.....	19
2.2.1	Transversal management in the City Council.....	19
2.2.2	Stakeholders in a civil works contract.....	21
3	Legal framework	22
3.1	EU Procurement Directives	23
3.2	National and regional legislation about public procurement	24
3.3	Local legislation about public procurement.....	25
3.3.1	Urban planning.....	25
4	Public procurement procedures	26
4.1	Types of contracts	27
4.2	Types of public procurement procedures.....	28
4.3	Stages of the public procurement process	33
4.4	Timescale for the public procurement.....	41
5	Financing nature-based solutions.....	42
5.1	Financial bodies and instruments	42
5.2	Financial planning.....	43
5.3	Funding opportunities.....	47
5.3.1	Sources for NBS funding.....	48
6	Practical information	52
6.1	Tips and recommendations for newcomers	52
6.2	FAQ Questions and Answers	53
6.3	Challenges and barriers.....	54
6.4	Lessons learnt.....	55
6.5	Case studies in the URBAN GreenUP project.....	56
6.5.1	Italy: Green Public Procurement Law.....	56
6.5.2	Liverpool: Soft market testing.....	57
6.5.3	Valladolid: Internal approval of the construction project.....	58
7	References	59
7.1	Websites.....	59
7.2	Bibliography	59

Annex I. Standard schedule of Works contract by open procedure.

Annex II. Questionnaires.



List of Tables

Table 1.1: Graph to the tendering processes integration into the RUP methodology (Source: Report D1.13. Methodology URBAN GreenUP. Second Stage, July 2020).....	15
Table 2.1: Ways for implementing NBS for the UGUP cities during the project.....	17
Table 2.2: Areas of the City Council with responsibility on the NBS implementation.	21
Table 3.1: Summary of national laws on public procurement.	25
Table 3.2: Summary of regional laws on public procurement.	25
Table 3.3: Summary of local urban planning for the UGUP cities.....	26
Table 4.1: Examples of types of contracts for implementing NBS.	27
Table 4.2: Types of public procurement procedures for NBS implementation. Legend: X black (exist in procurement legislation). X green (used to implement NBS)	28
Table 4.3: Minor contract characteristics and limits.....	31
Table 4.4: Suggested criteria to evaluate NBS procurement.	37
Table 4.5: Platforms for public procurement notice, national and local.	38
Table 4.6: Documentation for the evaluation of tender proposals.	39
Table 5.1: Financial instruments for the NBS implementation (Source: Naturvation project)..	43
Table 5.2: Budget breakdown for the construction of NBS. Practical example.....	45
Table 5.3: International, national and local funding opportunities for NBS.	50
Table 5.4: Private, social and other funding opportunities for NBS.	51
Table 6.1: Tips for the cities in the NBS public procurement processes.....	53



List of Figures

Figure 0.1: Stages in the standard public procurement process for URBAN GreenUP.....	10
Figure 2.1: Methods for implementing NBS in the cities	16
Figure 2.2: Public-private agreement for the Green façade in Valladolid.	18
Figure 2.3: Responsibilities for NBS in a typical City Council organizational chart.	20
Figure 2.4: Simple diagram of stakeholders for NBS implementation in a City Council.	20
Figure 3.1: The legal pyramid for Renaturing cities	23
Figure 4.1: NBS implemented through open procurement.	29
Figure 4.2: NBS implemented through Direct procurement.....	31
Figure 4.3: NBS implemented through Direct procurement.....	32
Figure 4.4: Five stages in the standard public procurement process for URBAN GreenUP (Source: own elaboration from “Public procurement guidance for practitioners” EU)	33
Figure 4.5: Flowchart of the stages in the procurement process (Source: Own elaboration, from “UN Procurement Practitioner’s Handbook”).....	34
Figure 4.6: Division in lots.	35
Figure 4.7: Implementation of SubDemo C in Izmir - Peynircioğlu Stream.	36
Figure 4.8: Contract implementation and its relation with the public administration.....	40
Figure 4.9: Public procurement process schedule diagram.	42
Figure 5.1: Sources of funding NBS in cities and their main value propositions	43
Figure 5.2: Types of value x Investment Sources (Source: Naturvation project. How to finance Nature-Based Solutions? www.naturvation.eu)	43
Figure 5.3: Representative chart of budget for the NBS implementation.	45
Figure 5.4: Life-cycle costs for the implementation of Nature-based solutions.....	46
Figure 5.5: Municipal finance tool (Source: UN-Habitat).....	47
Figure 5.6: Financial instruments for NBS categorization (Source: D7.4, based on Croci and Colelli, 2017).....	48
Figure 5.7: Frequency of funding sources for NBS actions (Source: Urban Nature Atlas. Naturvation).	49



Glossary

Definition of concepts

Nature-Based Solutions (NBS): Solutions that are inspired and supported by nature, which are cost-effective, simultaneously provide environmental, social and economic benefits and help build resilience. Such solutions bring more, and more diverse, nature and natural features and processes into cities, landscapes and seascapes, through locally adapted, resource-efficient and systemic interventions (Source: European Commission).

Public procurement (PP): Process by which public authorities, such as government departments or local authorities, purchase work, goods or services from companies (Source: European Commission).

Renaturing Urban Plan (RUP): Plan that incorporates the urban planning aspects directly related with nature-based solutions as major strategy to fight against climate change. It will be part of the Sustainable Urban Planning and totally integrated with the urban strategy for dealing with the main city challenges (Source: *D1.13 Methodology URBAN GreenUP - Second Stage*).

Business improvement district (BID): In a defined urban area, its owners or economic agents pay a special tax to the municipality, whose income is entirely used to improve or supplement municipal services in that district. The owners or traders, grouped together in some form of association, co-decide with the City Council on the use of these funds, which the owners' and/or traders' association itself manages relatively autonomously (Source: Instituto de Derecho Local. Univ. Autónoma de Madrid).

Special Assessment District (SAD): Geographic area in which the market value of real estate is enhanced due to the influence of a public improvement and in which a tax is apportioned to recover the costs of the public improvement (Source: Wikipedia).

Abbreviations

EEA – European Environment Agency

FR – Front-runner (city)

FW – Follower (city)

GI – Green Infrastructure

KPI – Key Performance Indicator

NBS – Nature Based Solution

PPP – Public procurement process(es)

RUP – Renaturing Urban Plan

SMEs – Small and medium enterprise



0 Abstract

The objective of this report is to provide a guideline for local entities helping with the legal processes associated with the implementation of their Renaturing urban plan (RUP) through nature-based solutions (NBS). This report defines the process of tendering for NBS as well as other procedures that cities need to consider to implement NBS. It additionally defines all parameters, specifications and documents that have to be taken into account, to ensure the RUP is correctly implemented at each stage.

This document has been elaborated and enhanced from the experiences collected by the front-runner (FR) or follower (FW) cities in the URBAN GreenUP project. The additional information provided has made it possible to draw up a general framework, common to all cities; highlighting particular case studies of some cities, as well as providing real examples already implemented by them.

Legislative framework

Cities which are implementing RUPs must, as a first step, address all levels of relevant legislation as well as defining their needs, according to their city challenges. The legislation to establish RUPs and implement the NBS selected for each city comprises of different legislation levels: local, regional, national and supranational. Having a legal expert to integrate the compendium of standards on public procurement, works management, public-private agreements and municipal orders, among others is essential to successful implementation of NBS.

Laws that refer to the RUPs and the implementation of NBS can include the following categories: urban planning, construction and architecture, heritage, environment, biodiversity, health and safety, management of resources such as water or energy and public procurement, among others.

Mechanisms for implementing NBS in a city and stakeholders

The implementation of NBS in cities can be promoted by various stakeholders: Direct by Local authorities through public procurement or business-as-usual activities, by private owners as well as through a mixed formula on public-private collaboration.

Managing NBS projects in the City Council involves many stakeholders from different departments and responsibilities, which must co-ordinate work effectively.

Public procurement procedure

Local government can promote the implementation of NBS through public procurement processes, subcontracting to external companies for the construction. These guidelines include the definition of standard public procurement processes, types of contracts, key objectives, main stages, documents and potential barriers.

Public procurement is the Governments' activity of purchasing the goods and services which it needs to carry out its functions. A public procurement process is often followed to implement NBS in the cities.



There are different types of public tendering procedures, such as Open, Restricted, or Minor contracts as well as Direct awarding contracts, among others, but these are the most common for NBS implementation. The selection of the approach will depend on both the economic limits of the implementation projects and the nature of the NBS contract.

Procurement is divided into three broad categories, each with a largely different approach: (a) (Civil) works, (b) Supply, and (c) Services. NBS are regulated mainly by works contracts.

Public procurement processes comprise of five key stages:

Preparation > Submission > Evaluation > Awarding > Formalization ---> Execution --> Closure

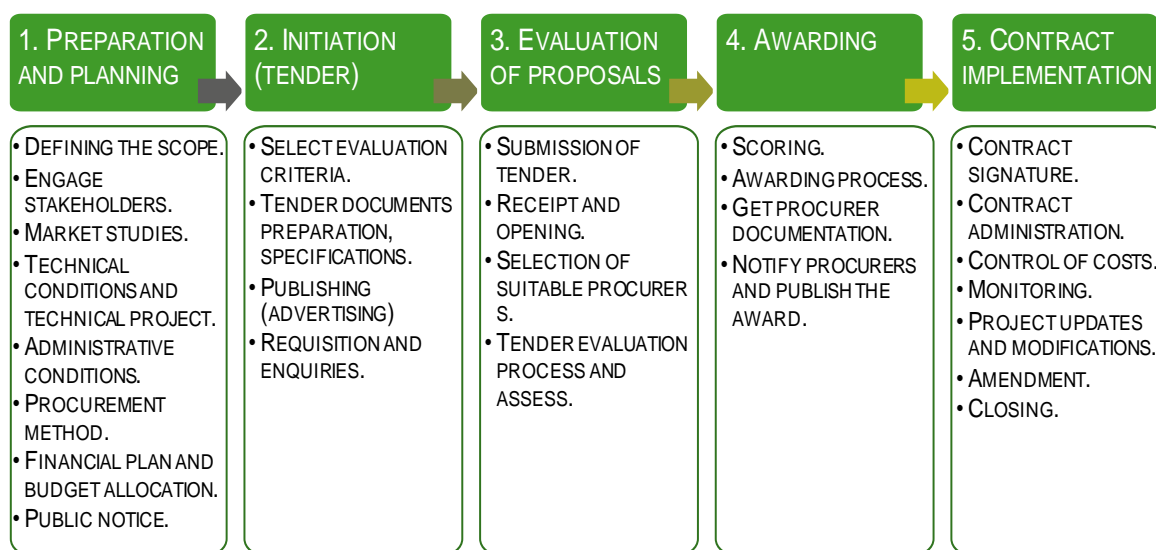


Figure 0.1: Stages in the standard public procurement process for URBAN GreenUP.

Source: own elaboration from "Public procurement guidance for practitioners" EU.

Key stages: The key stage for the cities in procurement is the definition of the technical project, as this is one of the main documents of the tender, which directly influences the tender and the construction process. Another key stage is the selection of the evaluation criteria, and considering the best scoring allocation for the quality/price proposal. Finally, in some cases evaluate and find suitable bidders are also challenges for the cities.

Evaluation criteria: The weighted criteria for the evaluation of NBS tenders usually include the price, typically favouring the lowest economic offer. The weight of this criterion varies from 60-100% to only 20%, with an average of 50%-70%. This wide range is due to the fact that this report has become evident that not all cities give greater weight to the criterion of price. In some cases, they give more value to sustainability or quality criteria of the proposal.

In this way, there are also other criteria used to evaluate NBS proposals, which seek improvement in quality, efficiency, and support delivery of other non-economic criteria. Among the non-economic criteria that can be used are the quality and experience of the procurer (from 0% to 70%), the increase in scope (10% to 60%) and the reduction in the execution time (0% to 20%).

In simpler contracts, such as the Minor Contract, the price is usually the only criterion.

Division in lots: In some cities, according to regulations or normal operations, the division of the contract into lots is not recommended, for reasons of economic and time efficiencies. However, in other cities, the division into lots is mandatory or recommended in order to make the tender more accessible to SMEs. Each Council should be aware of the local rules on public procurement.

Schedule

The average schedule for implementing NBS in the cities can last from 4-5 months up to 12 months, depending on complexity, approvals, and challenges. The execution of the contract depends heavily on the type of execution; however, it can take between 5 and 12 months. Contract closure can add another month. This means that the total execution time of a NBS in a city, from the time the tender is prepared, executed and closed, can take at least a full year.

Financing nature-based solutions

The financial plan for the implementation of NBS in cities should consider the whole life-cycle of the NBS, from design, construction, monitoring to maintenance and end of life. The economic valuation must be made in relation to reference price bases used in the city.

Funds must be available in the annual municipal budget as well as assessing the need for funds in medium and long term plans, in accordance with the city's political vision.

Funding opportunities: Currently, the most common form of funding for NBS in cities is via public funding. Cities have access to international public funds, such as Horizon 2020; national funds, such as specific funds from areas with responsibility in nature-based solutions, for example sustainable development and environment; as well as municipal budget, business-as-usual activities, taxes, compensations for sustainable actions, charges to the use of grey infrastructures, but also green bonds or bank loans.

On the other hand, private organisations can spend their own funds for the implementation of NBS, as well as access other sources such as bank loans, private investors, and be encouraged by opportunities linked to real estate development.

Finally, owners and communities have access to financial donations, crowd-funding, lease (greening as a service), subsidies and tax reductions, even access to bank loans and mortgage incentives.

Best tips and lessons learnt

The implementation of NBS in public administration systems is a complex and long process, with many barriers and challenges to be overcome along the way. The following advice is a product of the experience gathered by URBAN GreenUP cities.

1. Plan the implementation of NBS according to a schedule which has been adapted to match the duration of the procurement processes. Administrative processes take more time than expected.
2. Carefully plan the annual financial elements for the RUP, to ensure budget execution within the same fiscal year or in a mid-term basis.
3. The technical project is one of the key documents in the whole process, affecting both tendering and execution.



4. A tender may be required for the elaboration of the technical project and another tender for the construction/execution.
5. Rely on the support of experts in each discipline: technical, legal, procurement.
6. Create a multidisciplinary team in the Council.
7. Coordination among the Council departments with different responsibilities and priorities is not easy.
8. Make tenders easier for companies. Public tendering can discourage smaller organisations.
9. Tender scoring criteria must be clear, easy and preferably mathematically quantifiable.
10. Allow time and resources, (including financial resources), for the unexpected.



1 Introduction

Nature-based solutions (NBS) can address urban challenges exacerbated by growing urban populations and the impacts of climate change. They are multi-functional, cost-effective and provide a wide range of benefits, from improving public health to reducing energy costs and pollution to regenerating urban spaces (ICLEI, CBC).

Despite the evident social, economic and environmental value of NBS, some cities are facing challenges in delivering these solutions. In particular, many public authorities report difficulties in using public procurement to implement NBS projects.

As part of the URBAN GreenUP project, front-runner and follower cities are facing the challenges of developing Renaturing urban plans (RUP) and implementing NBS in their territories, through public tendering processes or other mechanism. In the processes of NBS implementation, key points, barriers and tips have been identified, which serve as a guideline for other cities with an interest in developing NBS, European and non-European.

1.1 Purpose

The target of this guideline is helping cities in the process of tendering for NBS, defining all **parameters, specification and documents** that have to be taken into account, which will allow the correct implementation of the RUP in all the stages that make up the process and articulate the different **stakeholders** that will take part on it.

This guideline includes the definition of the standard public procurement process, key objectives, principles, main stages, documents and potential barriers, including useful information for procurers such as criteria to evaluate the NBS procurement.

The initial purpose of this guideline has been extended with an additional section on the economic aspects of financing NBS interventions.

Finally, there is a section with practical information for the Local Entity procurers, with tips and recommendations, FAQs, lessons learnt and challenges faced during the implementation of NBS by the URBAN GreenUP FR and FW cities, based on their experiences.

1.2 How to use this guide and who is it for

This guide should be used as a general manual and reference for NBS implementation processes through public procurement or other administrative processes that local entities can follow. It is too complex to gather all the particular characteristics of each city in the world, so each local entity must address their own governing legal frameworks and particular processes to adapt and tailor the general content of this guideline to its particular case.

This guideline is focused on providing a general overview about how to implement the RUP and its NBS through public procurement processes. The main target group is the **city procurers** from the local entities. However, practical information collected from the experience of the URBAN GreenUP project that may also be of interest to academics, professionals and companies.



Although not all the information will be relevant to your city, this will help with thinking through options and considering concepts that are important to the process

1.2.1 Practical data sources

The information in this document is based on the legal terms and practical experience of the URBAN GreenUP cities, both front-runner (VAL, LIV, IZM) and follower cities (LUD, MAN, BIN). A questionnaire about procurement and NBS implementation was completed by every URBAN GreenUP city, which included seeking feedback on experience as well as making comparisons among cities. The answers from the questionnaire provide the main source of practical information, as well as detailing the collaboration in the URBAN GreenUP project and past deliverables such as D2.5, D3.5 and D4.5, *Tender documents* of FR cities.

The questionnaires completed by the URBAN GreenUP cities are listed in Annex II. See *Annex II. Questionnaires*.

1.3 Integration in the URBAN GreenUP Methodology

This guide to tendering is one strand of a methodology that has been developed through the Urban GreenUP project for the creation of a Renaturing Urban Plan (RUP). The aim of the RUP is to increase the quantity and quality of nature in a city and show how nature can help address challenges that cities face. Using nature to help tackle these challenges is referred to as using Nature Based Solutions (NBS).

The RUP is a phased and stepped approach which leads from the initial needs' assessment of an urban area, through prioritization of actions, to delivery and monitoring of NBS. The seven phases (A-F), 18 actions RUP methodology are shown in the diagram below.

How to start?	1 st . Understand your present	2 nd . Choose your future aspirations	3 rd . Integrate RUP and keep	"Renaturing Urban Plan"
A. Engage and Co-create	Action 1A. Identify and involve stakeholders	Action 2A. Prepare for co-delivery		Chapter I. Introduction to Re-naturing
B. Explore	Action 1B. Understand your "city" needs	Action 2B. Choose your "city" targets	Action 3B. Prepare RUP Plan integration into the Urban Plans of Local Municipality	Chapter II. City Targets
C. Diagnose	Action 1C. Understand your "city" capacity	Action 2C. Evaluate NBS Scenarios and select one	Action 3C. Define list of NBS Projects and Actions	Chapter III. City NBS Adopted Scenarios
D. Visualize	Action 1D. Map challenges	Action 2D. Set spatial priorities for NBS	Action 3D. Prepare assessment of the Impact and Risk	Chapter IV. City Impact
E. Plan	Action 1E. Establish Baselines	Action 2E. Choose how success will be monitored	Action 3E. Prepare the Up-scale Plan	Chapter V. Monitoring Program and Action Plan
F. Inform	Action 1F. Promote the initiative	Action 2F. Publish the RUP	Action 3F. Define budget, roles and responsibilities	Chapter VI. Roles and Responsibilities
A. Engage and Co-create	Action 3A. Assess lessons learnt and validate the strategy			Chapter VII. Processes and reforms



Table 1.1: Graph to the tendering processes integration into the RUP methodology (Source: Report D1.13. Methodology URBAN GreenUP. Second Stage, July 2020).

This guide supports the development of the Actions 3B, 1F and 3F, which are related with the implementation of the RUP through the installation of nature-based solutions in the city. The implementation must consider procurement processes, but also other administrative procedures, such as financing and allocated resources.

Action 3B: *Prepare RUP integration (into the urban plans local municipality)*

- **Output 3B-1.** The legal constraints associated with the adoption of the NBS proposed.
- **Output 3B-2.** List of the main constraints to the public procurement processes.
- **Output 3B-3.** The funding opportunities.
- **Output 3B-4.** The outline to the integration of the RUP methodology into the Municipality Planning.

Action 1F: *Promote the initiative (Information channels)*

- **Output 1F-1.** Review the internal stakeholders, external groups and community groups.
- **Output 1F-2.** Promote the initiative among the stakeholders.
- **Output 1F-3.** Validate the early list of NBS for consideration.

Action 3F: *Define budget, roles and responsibilities (Departments of Municipality Structure)*

- **Output 3F-1.** Define the organizational structure of the Municipality for the implementation of the RUP. Roles and responsibilities (internal).
- **Output 3F-2.** Publish a Local Communication and Dissemination plan with the final list of stakeholders (co-creation and plan implementation).
- **Output 3F-3.** Define the financial plan. Innovative financial tools. Annual budget.

Relation with other work packages:

[WP7] Deliverable D7.4 *Guidelines for the use of financial instruments and to design business models to implement NBS*. May 2019. Leader: Univ. Bocconi (BOC). Available to download: www.urbangreenup.eu See Section 5. *Financing nature-based solutions*.



2 Implementing NBS in the cities

This section describes the processes that the cities have to follow to promote the implementation of NBS. General procedures are differentiated from the case studies of the URBAN GreenUP cities.

2.1 Mechanisms for implementing NBS in a city

The implementation of NBS in cities can be promoted by various stakeholders. The responsibility not only lies with the local administration, but also with private owners.

- Local government can promote the implementation of NBS through public procurement processes, by subcontracting to external companies for the construction.
- Local entities can also promote and implement NBS through business-as-usual procedures, investing their own resources. This *in-house* procurement is delivered through existing Local Authority Services, providers, contractors and agreements.
- Finally, there is a mixed formula for the collaboration of local entities and private owners.

The following diagram summarizes the described options.

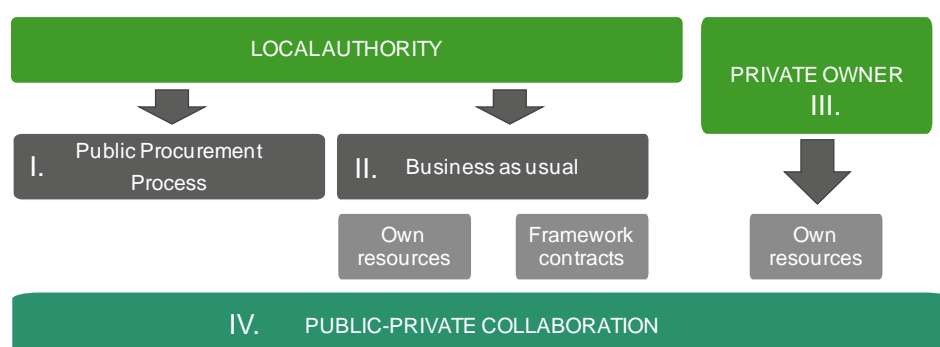


Figure 2.1: Methods for implementing NBS in the cities

How to implement NBS in the cities?	
Through public procurement processes	
▪	Leader: Local entities.
▪	How: Public procurement processes.
▪	Who: Through subcontracted companies.
▪	NBS examples: Water solutions such as SUDs, Natural wastewater treatment plant; green infrastructure such as green wall, vertical garden, green coverages; the mobile app; greenhouses, green parklets.
Through business-as-usual works (<i>in house</i>)	
▪	Leader: Local entities.
▪	How: Local entities' own means.
▪	Who: External companies with framework agreements. Or with their own resources (personnel, equipment).
▪	NBS examples: Tree planting, green areas, SUDs in highways, streets, municipal orchards, non-technical interventions, communication activities.

Citizens and private companies
<ul style="list-style-type: none"> ▪ <i>Leader</i>: Private owners and companies. ▪ <i>How</i>: Execution of the works through private contracts. ▪ <i>NBS examples</i>: Green infrastructure in private buildings, such as El Corte Inglés or St John's Shopping Centre.
Public-private collaboration (Mix)
<ul style="list-style-type: none"> ▪ <i>Leader</i>: Local entity and a private owner/company. ▪ <i>How</i>: Signing an agreement. ▪ <i>Who</i>: Subcontracted companies or own resources. ▪ <i>NBS examples</i>: Private buildings with public interest.

As an illustrative example, the following table shows the ways in which cities have implemented NBS in the URBAN GreenUP project. It can be seen that most of the implementation of NBS falls to the local authority.

Country and partner	Local authority through public procurement processes	Local authority through business-as-usual activity	Public-private collaboration	Private owners/ companies
Spain (VAL)	X	X	X	
UK (LIV)	X	X		
Turkey (IZM)	X			
Italy (MAN)	X	X		
Germany (LUD)	X	X	X	
Vietnam (BIN)	X			X

Table 2.1: Ways for implementing NBS for the UGUP cities during the project.

2.1.1 Public procurement

This report describes the public procurement procedures in detail (see section 4).

2.1.2 Business as usual works

It is important to highlight the fact that cities can implement NBS within their regular city management activities, without the need to launch new public tender processes. It allows for quick and easy procurement under existing arrangements (framework agreements) without the need to get quotes or advertise. There are usually cost efficiencies in combining procurement works like this.

One of the most common ways of implementing NBS is through the framework service contracts signed by the regular activity of the local entities

The following are some illustrative examples, taken from the URBAN GreenUP project experience.

Department of Green Areas. The acquisition and plantation of trees can be done through the usual activity of the department of Green Areas (Environment Area, Municipal services, Parks and Garden area, etc.). Green area maintenance activities are common in the operation of a City Council, which either uses its own resources or subcontracts the services to an external



company (framework service contract). For instance, the Green Public Management Service can develop many business-as-usual activities, plant new trees, implement technological irrigation systems; implement a mulching system for mowing without waste production, among other activities.

Highways Department. On a street or large avenue, pavement renovation works are scheduled by the Highways department, which can also include, sustainable drainage urban systems (SuDs) installed in the central reserve (median strip). In addition, on the same site, new tree pits can be created and new trees planted. All the management is by the Highways department, which integrates the cost of the NBS. In this case, a new public tendering process is not awarded. The execution of the works, both the pavement, SuDs and the trees, is carried out by the company subcontracted by the City Council for the maintenance of the highways, under a framework contract for the local entity.

2.1.3 Public-private collaborations

The implementation of NBS opens up the possibility of public-private partnerships. Below are several examples of particular agreements between private companies and a public entity, for the implementation of NBS.

Implementation of the Green façade in El Corte Inglés building in Valladolid. The green façade in Valladolid has been fully installed in a private building that belongs to El Corte Inglés department stores. An agreement between the two entities was signed on May 2019, with the commitments agreed (co-responsibility, co-financing), which is a good example of public-private collaboration. The implementation works were divided in two sub-projects; with the first for El Corte Inglés, who are in charge of the works inside the building and the structural reinforcement of the building. This task is co-designed, executed and financed by El Corte Inglés. The second sub-project for the construction of the vegetable garden was executed through a process of public procurement. This part was financed by the European Commission through the URBAN GreenUP project, and the Valladolid City Council co-financing. This second project was undertaken by Singular Green, in coordination with El Corte Inglés architects. Finally, El Corte Inglés is in charge of the maintenance of the green façade.



Figure 2.2: Public-private agreement for the Green façade in Valladolid.

Implementation of the Electrowetland in Valladolid. To address issues associated with the implementation of the Electro-wetland (EW), LEITAT Technology Centre and Valladolid City Council signed a collaboration agreement. This agreement is the legal instrument for the

implementation of the Electrowetland (VAc26) in Valladolid. This intervention is designed, constructed, operated and monitored by LEITAT. Valladolid City Council will not launch any procurement procedure for the works implementation, as LEITAT will subcontract a construction company for this task, as well as finance the costs. The implementation of this intervention differs from the usual mechanisms of public tendering.

Other examples: Ludwigsburg. Ludwigsburg city also implemented NBS through public-private collaborations. They built a "green room" near the city hall a few years ago. This was in cooperation with a landscape gardener.

Other examples: Mantova. In Mantova the public-private collaborations are conventions signed in the context of urban planning instruments by private owners. Those infrastructures can be managed by private owner as public use or transferred to public property.

2.2 Stakeholders

One of the steps of the methodology defined by the URBAN GreenUP project is to disseminate the Renaturing Urban Plan among the stakeholders: internal and external. There is a defined communication and dissemination strategy to share the RUP through the different means of communication (internal promotion, media and dissemination, etc.).

This section includes the main stakeholders in the city council as well as the external stakeholders.

2.2.1 Transversal management in the City Council

Implementation of the Renaturing Urban Plan through the promotion of nature-based solutions begins with the political support of the local government. After the municipal election period, there is a risk that the priority of the resulting political party will be different from that of the government that has been relieved, and thus political support for the NBS may be lost. This change in priorities can result in a decrease in the allocated budget and a lack of support from the public administration technicians and procurers (Source: European Commission).

However, a municipal government committed to implementing NBS and increasing the city's resilience to climate change allocates resources for implementation and assigns functionalities from different affected departments.

The implementation of NBS is a cross-cutting discipline. Today there are still traditional technical personnel in municipal governments who prioritise the application of traditional grey engineering solutions, as opposed to natural solutions based on nature, with the same results.

Procurement officers might lack the political and institutional support to drive forward NBS projects. This is especially true in cities facing strict budget constraints, where NBS projects might not be prioritised and where they have to compete against other infrastructure projects for funding. Often, traditional paradigms of spatial planners persist (i.e. related to path dependency and long-term predictability) that tend to favour conventional engineering solutions.



The following diagram reflects how the integration of the RUP is transversal along the whole organizational chart of a City Council. Different areas of the municipality will be involved (e.g. officers will be involved from the project department, legal and procurement departments, urban planning, public works department, environment area, local services, real estate, community development and innovation).

Municipalities should create a multidisciplinary team to implement NBS.

It is desirable that the team works within the same department, to improve coordination.

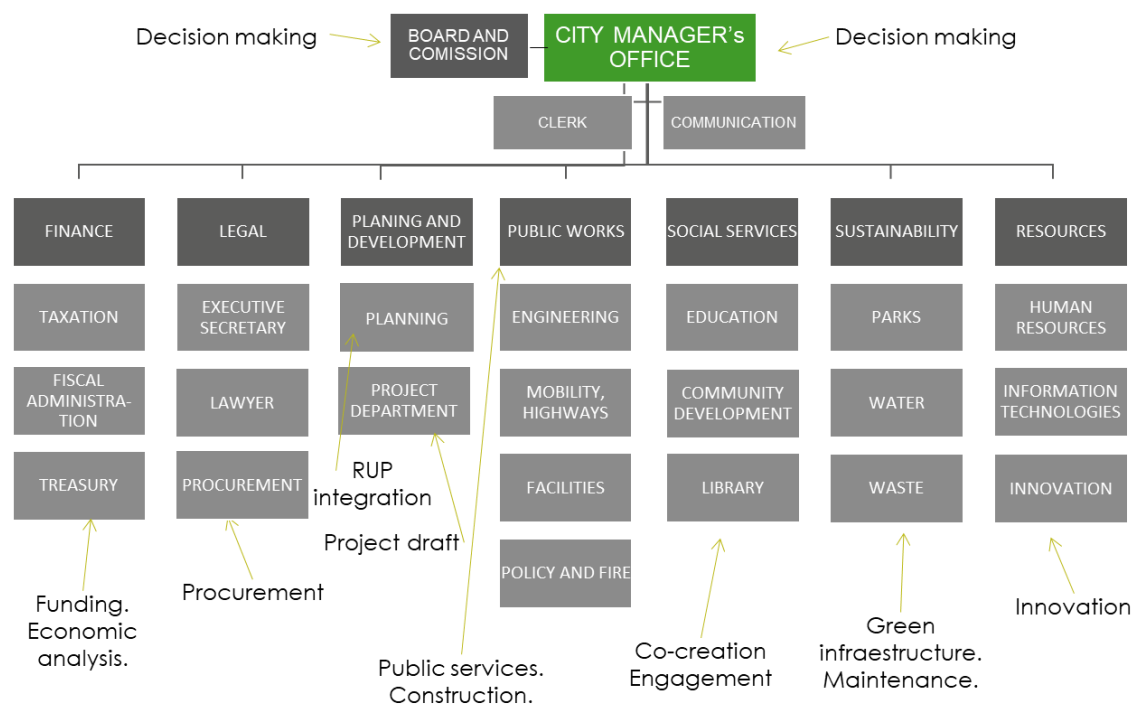


Figure 2.3: Responsibilities for NBS in a typical City Council organizational chart.

Source: This diagram comprises a general scenario provided by the URBAN GreenUP cities that represents a typical City Council organizational chart.

The following diagram simplifies the actors of a Local entity related to public tendering.



Figure 2.4: Simple diagram of stakeholders for NBS implementation in a City Council.

The following table shows the different departments involved in the NBS implementation for the URBAN GreenUP cities. As you can see, in every study case there is a high number of departments involved.

Country and partner	Areas with responsibility on the NBS implementation
Spain (VAL)	Innovation (leads the NBS procurement, implementation and communication activities); Urban planning (technical and legal advice); Environment (trees selection and planting, maintenance, co-design); Finance (economic balance); Municipal water body Aquavall (water NBS management, co-design)

	Mobility (cycle lane definition, NBS location).
UK (LIV)	Environment / Community Services/ Streetscene Services (lead implementation and maintenance) and / Neighbourhood services (help with communication); Regeneration and Economy / Highways services (implementation); / Planning services (permission); / Regeneration Services (develop RUP); Communications (promote NBS and raise awareness); Finance and Resources (finance and procurement).
Turkey (IZM)	Mayor of municipality (decision maker) > Project Department (technical and cost processes) > Tendering Department (procurement processes) > Construction Works Department (implementation processes).
Italy (MAN)	Civil Works Department (evaluate NBS potential) > Urban and Environmental Departments (introduce NBS in city planning > Private Buildings Authority Department (control NBS in private buildings).
Germany (LUD)	Climate, Energy and European Affairs (coordination of all climate-related issues) > Building construction (implementation in buildings within the city) > Urban Planning (Long-term planning of urban development; determine the location of measures) > Structural Engineering (responsible for structural changes in the city and must determine legal framework > Civil Engineering and Green Spaces (construction management) > Technical Services (maintenance and monitoring)
Vietnam (BIN)	Natural Resources and Environment Unit (guideline for NBS design) Finance and Planning Unit (Investment planning and NBS implementation) Urban and Construction monitoring Unit (construction planning, housing, urban development and public services)

Table 2.2: Areas of the City Council with responsibility on the NBS implementation.

2.2.2 Stakeholders in a civil works contract

Civil works is the main way to implement NBS in the cities, as they are mainly construction actions. The execution of civil works in relation to a public tendering process, usually involves the following stakeholders:



Local authority



Supervisor



Designer



Contractor

- **Contract authority or Local Authority:** Body responsible for the contract management in the public administration. It is primarily responsible for the procurement procedures. The local authority might have other entities:
 - **Recruitment board:** A public administration body composed of a number of qualified technicians that evaluate the proposals received in both administrative and technical terms, in accordance with the criteria defined and the characteristics of the procurer that have been requested. This body might be composed by designers/architects/technicians and expert contractors.
 - **Government board:** The governing body of the local authority that approves the tender publication and the selection of the successful bidder. It can be the entire Local government, but also a delegated Councillor. This is the decision maker.

This stakeholder is not considered as an active actor for some URBAN GreenUP cities.

- **Municipal Supervisor:** Responsible for the public administration and supervision of both the contract and technical advisor.
- **Designer:** Licensed architect/engineer with technical and legal capacity for the drafting and approval of the construction project. He/she must/should have liability insurance. Other types of contracts, such as Supply or Service might not need a Designer.
- **Contractor:** Company or legal person that performs work on a contract basis. In this case, this is the company that constructs/implements the NBS. Derived from this the stakeholder “Subcontractor” is an individual or business that signs a contract to perform part or all of the obligations of another's contract.
- **Works manager:** Construction operative who has the ability and responsibility to handle public safety, time management, cost management, quality management, decision making, mathematics, working drawings and human resources of the civil works.

3 Legal framework

Local authorities must handle and master the legislation that applies to establish RUPs and implement NBS selected for each city at different levels: local, regional, national and supranational. This is a preliminary step in parallel to the definition of their needs, as defined by their city challenges.

Local authorities must firstly identify the legal framework that applies in the municipality where a RUP is being considered. A legal expert should integrate their compendium of standards on **public procurement, works management, public-private agreements and municipal orders**, among others.

- *Supranational law*

The first two distinct groups are EU countries and Non-EU countries, as the URBAN GreenUP project is a European project with follower cities from other continents.

The EU countries are regulated by the rule of law of the European Union. Every action taken by the EU is founded on treaties that have been approved democratically by its members. EU laws help to achieve the objectives of the EU treaties and put EU policies into practice. There are two main types of EU law – primary and secondary.

EU legal acts are the EU Treaties, Regulations and Directives (all compulsory for all the EU countries), Decisions (compulsory for the determined countries) and Recommendations and Opinions (both have no binding force).

The main objective of this action is to clearly identify the regulatory framework that restricts the implementation of the City Urban Plan – RUP – with NBS selected. This includes all the legal elements for the municipality including international and national level (standards, laws, regulations) and local level (rule, norm, ordinance, plan), as well as identifying the procurement processes and the funding opportunities.



Each Member State of the European Union (EU) has its own law and legal system. Member State (MS) law can comprise both law at the national level (or national law, which is valid anywhere in a certain Member State) and laws which are only applicable in a certain area, region, or city.

- *National law*

Most countries have a national database of their law. Countries' law derives from various sources, in particular the constitution, the statutes or legislation (which can be adopted at national, regional or local level), and/or regulations by government agencies, etc.

The national law on public tenders should be consulted in this category.

- *Regional and Local law*

Local law is a law limited in application to a particular district within a territory which is also referred to as a local act. Regional laws are shared laws among a common territory. Local Urban Planning is included in this type of regulation, as well as rules, norms, ordinances or other plans.

In this category, all local ordinances affecting the installation of NBS must be consulted, such as licenses and authorizations, occupation of public space, mobility, as well as the payment of fees (tax ordinances).

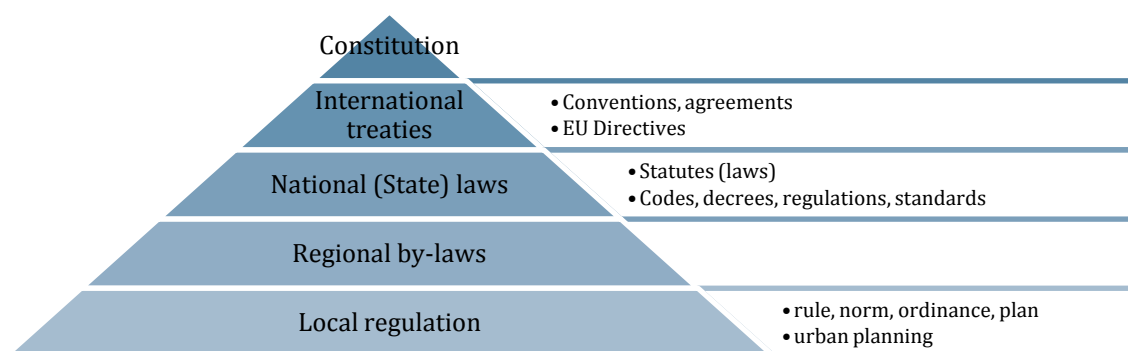


Figure 3.1: The legal pyramid for Renaturing cities

3.1 EU Procurement Directives

Since the 1970s, the EU has adopted legislation to ensure that the EU public procurement market is open and competitive and that suppliers are treated equally and fairly. The rules cover aspects such as advertising of contracts, procedures for assessing company credentials, awarding of contracts and remedies (penalties) when these rules are breached.

The EU rules are contained in a series of directives that are updated from time to time. Member states have to make national legislation (regulations) to implement the EU rules in domestic law by certain deadlines. The most recent update of the EU procurement directives was in 17th April 2014, with the aim of simplifying the rules and procedures for public sector tender competitions across Europe. This benefits public purchasers and businesses, particularly SMEs. Member states then had 2 years to implement these in national law.

These directives are updated to January 2020:

- Public procurement: Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC (Consolidated text, 1/01/2020 link [here](#)).
- Concessions: Directive 2014/23/EU of the European Parliament and of the Council of 26 February 2014 on the award of concession contracts (Consolidated text, 1/01/2020 link [here](#)).
- Utilities: Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC (Consolidated text, 1/01/2020 link [here](#)).

Public procurement is also subject to the World Trade Organization Government Procurement Agreement.

The content on the public procurement process for the construction of works, supplies or services, for the implementation of the NBS in cities of this guideline is initially based on the Directive 2014/24/EU.

3.2 National and regional legislation about public procurement

The following table comprises the national legislation about public procurement of some countries from the front-runner and follower cities of the URBAN GreenUP project.

Country and partner	National legal framework
Spain (VAL)	Law 9/2017, of 8 th November 2017, on contracts of the Public Sector (LCSP)
United Kingdom (LIV)	Crown Commercial Services (CCS) UK Public Contract Regulations, 26 th February 2015 (PCR) Public Procurement (Amendments, Repeals and Revocations) Regulations 2016; Utilities Contracts Regulations 2016; Concession Contracts Regulations 2016 (CCR)
Turkey (IZM)	Public Procurement Law No. 4734 and dated 04.01.2002 by Izmir Metropolitan Municipality http://www2.ihale.gov.tr/english/4734_English.pdf
Italy (MAN)	Public contracts law D. Lgs. 50/2016. Law 10/2013 Green Public Development. D.M. 63, 10/03/2020 Minimum Environmental Criteria in Green Public Contract.
Germany (LUD)	Regulations on the Award of Contracts and Contracts for Construction Work: Vergabe- und Vertragsordnung für Bauleistungen - Teil A (VOB/A) Procurement and Contract Regulations for Services: Vergabe- und Vertragsordnung für Leistungen – Teil B (VOL/B)
Vietnam (BIN)	Law on State Budget No. 83/2015/QH13: Regulations on the formulation, execution, audit, settlement, and supervision of the state budget; duties and powers of relevant agencies, organizations, units and individuals using the state budget for the implementation of public investment. Law on Public Investment No. 39/2019/QH14: Regulates the state management of public investment; management and use of public investment capital; rights, obligations and responsibilities of agencies, units, organizations and individuals related to public investment activities.



	Law on Bidding No. 43/2013/QH13: State management regulations on bidding; Responsibilities of related parties in the procurement activities.
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Table 3.1: Summary of national laws on public procurement.

The following table comprises some examples of regional legal framework related with procurement nature-based solutions.

Country and partner	Regional legal framework
Spain (VAL)	n/a
United Kingdom (LIV)	The Late Payment of Commercial Debts Regulations 2013. Equality Act 2010. The Public Sector Equality Duty 2011. Public Services (Social Value) Act 2012. European Union (EU) Public Service Contracts Directives. The Local Government (Transparency Requirements) (England) Regulations 2015. Small Business Enterprise and Employment (SBEE) Act 2015.
Turkey (IZM)	n/a
Italy (MAN)	Ecological regional network. Hydraulic invariance.
Germany (LUD)	Regional Procurement: VwV Beschaffung
Vietnam (BIN)	n/a

Table 3.2: Summary of regional laws on public procurement.

3.3 Local legislation about public procurement

Applicable laws that refer to the RUPs and implementation of NBS can include the following categories: urban planning, construction and architecture, heritage, environment, biodiversity, health and safety, management of resources such as water or energy, municipal works such as mobility or facilities, and public procurement, among others.

3.3.1 Urban planning

To gain acceptance for NBS in planning cultures, a transition from the traditional grey planning towards planning with a nature based approach is needed. Urban interventions using NBS need a long-term perspective to comprehend the benefits of NBS compared to grey solutions.

Some Key messages to introduce NBs in the local urban planning:

- NBS represent a 'pro-active' approach to the planning and management of green infrastructure in urban areas.
- NBS are not just about utilizing nature.
- NBS can and should be developed in a way that is based on the multifunctionality of green infrastructure.
- With well-planned NBS, green infrastructure is well connected and it preserves the important nature areas from the point of view of biodiversity. Thus, NBS can also improve ecosystem health (Source: OpenNESS project).

The following information about NBS should be checked in the local Urban Planning:



- The use of regulations or standards, e. g. a green factor of 10 m² / person within 400 m or e.g. green roofs in local building codes, or e.g. Fire service conditions for action in emergencies such as minimum height of cables and other obstacles, for truck access.
- Analyse the compatibility of the use assigned to the plots of land in the municipality, favouring the use of "Green Areas" or "Equipment".

Country and partner	Local legal framework for NBS implementation and procurement
Spain (VAL)	Local urban planning 2020: <i>Plan General de Ordenación Urbana de Valladolid</i> . Official Gazzette Castilla y León, 19 th June 2020 <i>Instruction 1/2018, to promote socially efficient contracting: strategic, integral and sustainable in the Valladolid City Council and its public sector entities</i> . Approved by the Local Government Board on 9 May 2018
UK (LIV)	Liverpool City Council Contract Standing Orders (CSO's). LIV have have a Liverpool Local Plan that is currentyl being updated and is with Government for review that sets out how the city develops and the relevance and protection/promotion of green space in the city.
Turkey (IZM)	Izmir Development Urban Plan
Italy (MAN)	Territorial Governmental Plan, PGT. Mobility sustainable Urban Plan PUMS – Civil Works Plan and budget – Building regulation. Ex. Campo Canoa parking area, Fiera Catena cycle path.
Germany (LUD)	Instructions of the City of Ludwigsburg on the Award of Contracts for Supplies and Services: <i>"Dienststanweisung der Stadt Ludwigsburg über die Vergabe von Liefer- und Dienstleistungen"</i> (DA Vergabe VOL). Climate adaptation concept of the city of Ludwigsburg: <i>"Klimaanpassungs-konzept der Stadt Ludwigsburg"</i> (KliK). Land use plan of the city: <i>Flächennutzungsplan der Stadt</i> (FNP). Development plans: <i>Bebauungspläne</i> . Urban development concept: <i>Stadtentwicklungskonzept</i> (SEK). Land development concept: <i>Freichflächenentwicklungskonzept</i> .
Vietnam (BIN)	General and detail planning for the Quy Nhon urban area stipulating the type of development and construction in specific areas.

Table 3.3: Summary of local urban planning for the UGUP cities.

4 Public procurement procedures

Public procurement may be defined as the Governments' activity of purchasing the goods and services which it needs to carry out its functions. A Public procurement process is followed to implement the NBS in the cities.

Public procurement is regulated as administrative contracts. Public contracts are signed between public administration bodies and one or more economical contractors, whose objectives are the execution of construction works, to supply products or provide services.

"Research and innovation into governance practices including decision-making processes, constraints and opportunities related to institutional and regulatory frameworks, as well as the development of new financial instruments are all necessary to create a market for Nature-Based Solutions" (Source: Nature-Based Solutions & Re-Naturing Cities. European Comission).



The procurement and contract administration process are prone to risks, which may result in negative consequences for the public administration and the tenderer. These risks should be treated as potential barriers. Potential barriers initially identified often include delays in the different stages, money wasted, time lost, complaints from tenderers or legal actions.

4.1 Types of contracts

Procurement is divided into three broad categories, whose approach is largely different: (a) Goods, (b) Works, and (c) Services. NBS are regulated mainly by works contracts.

The selection of the correct type of contract is the first step on the legal implementation of the NBS. Each one of the following types of contracts have different characteristics that influence the deadlines, procedures, obligations of the parties and especially the execution of the contract itself.

Works contract: Result of a set of works for construction or civil engineering, intended to fulfill by itself an economic or technical function, which is intended for a real property. "Work" shall also be considered works which modify the form or substance of the terrain or its volume, or the improvement of the physical or natural environment.

Supply contract: Supply contracts are those which aim at the acquisition or leasing, with or without option of purchase, of products or movable property.

Service contract: Service contracts are those whose purpose is to make a performance consistent with the development of an activity or to obtain a result other than a work or supply, including those in which the successful bidder is obliged to execute the service successively and by unit price.

Unless there is an acceptable natural connection between them purchase of goods, services and civil works cannot be consolidated in the same procurement process.

According to experience, the implementation of NBS is carried out mainly by means of Works contracts.

(Civil) Works contract	Supply contract	Service contract
Implementation of a vertical garden, green wall, ecosystem island	Purchase of Trees and bushes	Project drafting
Construction of SUDs schemes (drainage, wetlands)	Instrumentation for monitoring	Civil works management
Creation of an Educational Environmental Park	Purchase of Smart soil	Planting trees
Trees and pollinator's planting		Soil permeability surveys
Installation of green parklets		Ecological and Utility surveys
Construction of a green car park covering shelter		Maintenance
Construction of a green corridor		Engagement activities

Table 4.1: Examples of types of contracts for implementing NBS.

4.2 Types of public procurement procedures

Within the legal framework of each city there are different types of public tendering processes that allow for the implementation of nature-based solutions. The following table lists the types of contracts for URBAN GreenUP cities, describing in detail those that are most commonly used for NBS.

Type of public procurement procedure	VAL	LIV	IZM	MAN	LUD	BIN
Open procedure	X	X	X	X	X	X
Restricted procedure	X	X	X	X	X	X
Negotiated procedure / Competitive procedure	X	X	X	X	X	X
Negotiated/Competitive proced. without publication	X	X		X	X	
Competitive dialogue	X	X				X
Innovation partnership	X	X		X		
Direct awarding		X	X			X
Minor contract	X	X				
Project competition	X				X	X

Table 4.2: Types of public procurement procedures for NBS implementation. Legend: X black (exist in procurement legislation). X green (used to implement NBS)

Our experience shows that the main procurement methods for the implementation of NBS are the Open procedure, Direct awarding and Minor contracts.

Open procedure

In an Open Procedure any interested economic operator may submit a tender in response to a call for competition. **This is the main type of procedure for the NBS tendering processes.** The minimum time limit for submission of tenders is 35 days from the publication date of the contract notice. If a prior information notice was published, or if there is urgency, this time limit can be reduced to 15 days. If the tender is delivered by electronic means, time limit can be reduced by 5 days to 30 days. The tender shall be accompanied by the information for qualitative selection that is requested by the contracting authority.

Section 4.4 describes the general timescale obtained in an open procedure for the implementation of NBS.

Implementation of NBS by open procedures (Examples): Green wall, green covering shelter, green roof, vertical mobile gardens and other green infrastructure, SUDs techniques, SUDs ponds, rain garden, Pollinators Planting, Renaturing car parking NBS interventions, green car parklets, sustainable greenhouses.



Figure 4.1: NBS implemented through open procurement.

Restricted procedure

Any business may be asked to participate in a restricted procedure, but only those who are pre-selected by the contracting authority following pre-qualification, will be invited to submit a tender.

This type of procedure is suitable when the open procedure is not applicable as the nature of the subject (works, service, supply) requires specialty, high technology and/or intellectual services of special complexity (some consulting, architecture or engineering services).

Local authorities can set a minimum of candidates with the required capabilities, for instance five. Likewise, there must be received a minimum of proposals, e.g. three. Any negotiation is prohibited.

Negotiated procedure

The contract conditions are negotiated with one or more candidates, so businesses are invited to negotiate the terms of the contract. What is negotiated is the economic and technical aspects, description of needs, negotiation procedure to follow, guaranteeing transparency and awarding criteria.

Most contracting authorities can use this procedure only in a limited number of cases, for example for supplies intended exclusively for research or testing purposes. This procedure is essential when the service needs to develop a previous design or adapt work by the bidders, or includes a project with innovative solutions when it is not possible to establish technical specifications, or in other special circumstances.

But how does it work? Qualified procurers are invited to submit their initial proposals, which do not include prices, on aspects such as technical details or methodologies. The contracting authority interviews each bidder on the best methods and solutions to meet the needs of the contract. After clarification of the conditions, as a result of the technical interviews, the bidders who have demonstrated their capacity and capability to meet all these conditions shall

be asked to submit their offers including the tender price, based on a reviewed and clarified technical specifications. Bidders' final offers will not exceed their initial price.

Negotiated procedure without publication

Under certain conditions the negotiated procedure can be chosen even without publication of a contract notice, for example in the following cases:

- where no tenders were submitted in an open or restricted procedure.
- in extremely urgent cases, reserved or secret, due to unexpected and unforeseen events such as natural disasters or epidemics, immediately events such as in events of defense and security, etc.
- in cases where, for technical reasons, the contract can be carried out only by a single business.

In this case, it might be compulsory to invite at least three tenderers, depending on local authorities.

Other types of public contracts

Direct procurement

Direct procurement can occur when there is no other supplier for the NBS and the service or product is unique, as it can be specially designed for any request.

In general, this method may be applied in the some of the following cases without advertising:

- when the needs can be met from only one (legal) person; or only one (legal) person has exclusive rights with regard to the need;
- contracts with certain economic value limits (EUR/GBP/TRY/COP/VND); e.g. in Turkey, for contracts of less than fifteen billion Turkish Liras for the metropolitan authorities; in Vietnam, for contracts of less than 100 million VND ~ 4,000 €¹.
- for the initial supply of products or services under standardization;
- purchase or lease of real estate for the contracting authority; medicine and other sanitary services; legal representation for the contracting authority; unforeseen electoral situations; etc.

Not every city researched can legally apply direct procurement. However, some cities have already implemented NBS through this procedure.

Implementation of NBS by Direct procurement (Examples): Pollinator smart pillars, Mobile forest in tree containers made with recycled materials, Bio-App (iNaturalist). Direct purchase assets, goods and services to maintain regular operations (maintenance).

¹ Vietnam: Direct procurement contents are specified in Circular No. 58/2016 / TT-BTC dated March 29, 2016 of the Ministry of Finance.



PopUP Forest in Liverpool. This was commissioned locally to the specifications of the municipality. It is not available on the open market.



Smart pillars in Liverpool. This NBS is sold only by one company.
www.scotscape.co.uk/services/living-pillar



Containers for Trees in Liverpool. This NBS is sold only by one provider.
www.europlanters.com/wp-content/uploads/2019/09/Europlanters-Recycle-leaflet-.pdf

Figure 4.2: NBS implemented through Direct procurement.

Minor contract

This procedure simplifies the public tendering process, but it is limited to a certain scope. E.g. the limits below which the Minor Contract can be used are the total value of the contract (excluding VAT). There must be a minimum of 2-3 companies contacted to provide proposals. Contact can be delivered easily by email, although all communications must be in written form. This process has a shorter period for the call for proposal, usually about 15 days.

Minor contract		
Value limit	Procurement Method	Competition requirements
<40,000 € for civil works <15,000 € for supply or service contracts (VAT no included)	At least 3 written quotations are to be sought and a record kept.	Awarding for the lowest cost, best value for money.
< £500,000 for civil works <Up to £5,000 (VAT no included)	At least 2 written quotations are to be sought and a record kept.	Awarding for the lowest cost, best value for money.

Table 4.3: Minor contract characteristics and limits.

Not every city researched can legally handle Minor contracts via a direct procurement approach. However, some URBAN GreenUP cities have already implemented NBS through this procedure.

Implementation of NBS by Minor contracts (Examples):

- Minor works contracts (MWC): Urban garden bio-filter; Composting facilities; Floating islands.
- Minor service contracts (MSC): Project management for the Stormwater management systems or the Sustainable park; Soil Survey.
- Minor Supply contract (MSuC): Purchase of trees.

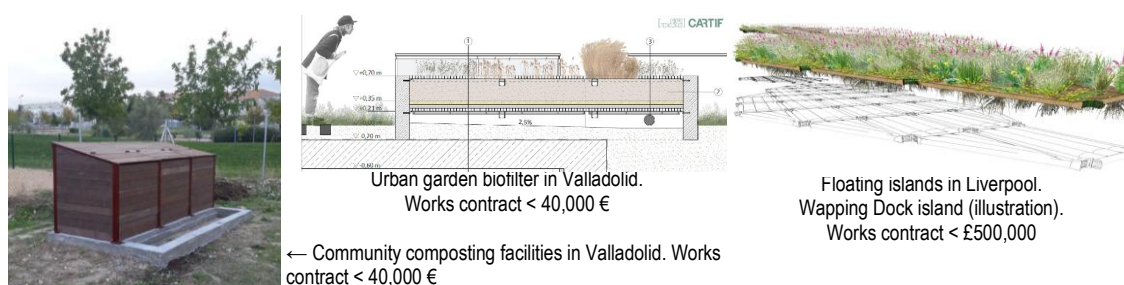


Figure 4.3: NBS implemented through Direct procurement.

Other types of procedures

The following types of procedures are uncommonly used when implementing RUPs in the cities. However, they are legally viable for some cities. This information provides an illustrative example of other types of procurement procedures that may exist.

Innovation partnership

The innovation process is applied when it is necessary to conduct research and development activities with respect to innovative works, services and products that will subsequently be purchased by the public authorities. The administration selects the candidates that can propose tenders after the call for competition and the presentation of the requirements for companies. Then, a research and development phase starts, and continues, in successive phases that may end in the execution and purchase of the resulting supplies, services or works. This type of procedure is considered in EU legislation (Directive 2014/24/EU)

Project competition

Project competitions are the procedures aimed at obtaining plans or projects, mainly in the fields of architecture, urbanism, engineering and data processing, through a selection entrusted to a jury, after the tendering process. The valuation of the proposals will refer to the quality of the projects, and their technical, functional, architectural, cultural and environmental values. The jury is constituted with members in accordance with the rules of the competition. The award to the successful participant is approved by the contracting authority. The minimum number of participants in the competition is three bidders (Source: LCSP, Art. 177, Spa: *Concursos de proyectos*).

Competitive dialogue

This procedure Competitive dialogue is often used for complex contracts such as large infrastructure projects where the public authority cannot define the technical specifications at the beginning and for more complex contracts where the duration of the procedure is not an issue. Premiums or compensation for expenses derived from the presentation of offers may be established. The administration invites dialogue with companies through a contract notice, and interested businesses can request to participate. In this dialogue the final technical, legal and economic aspects are defined. Results of the dialogue can be several options for tendering or just one. All bidders will be allowed to present a final offer. Competitive dialogue cannot be used by public services providers in the water, energy, transport and postal service sectors.

4.3 Stages of the public procurement process

The public procurement process comprises the following five stages which lead to publishing the tender, request to participate, proposals submission, evaluation and awarding.

Preparation > Submission > Evaluation > Awarding > Formalization--- → Execution -- → Closure

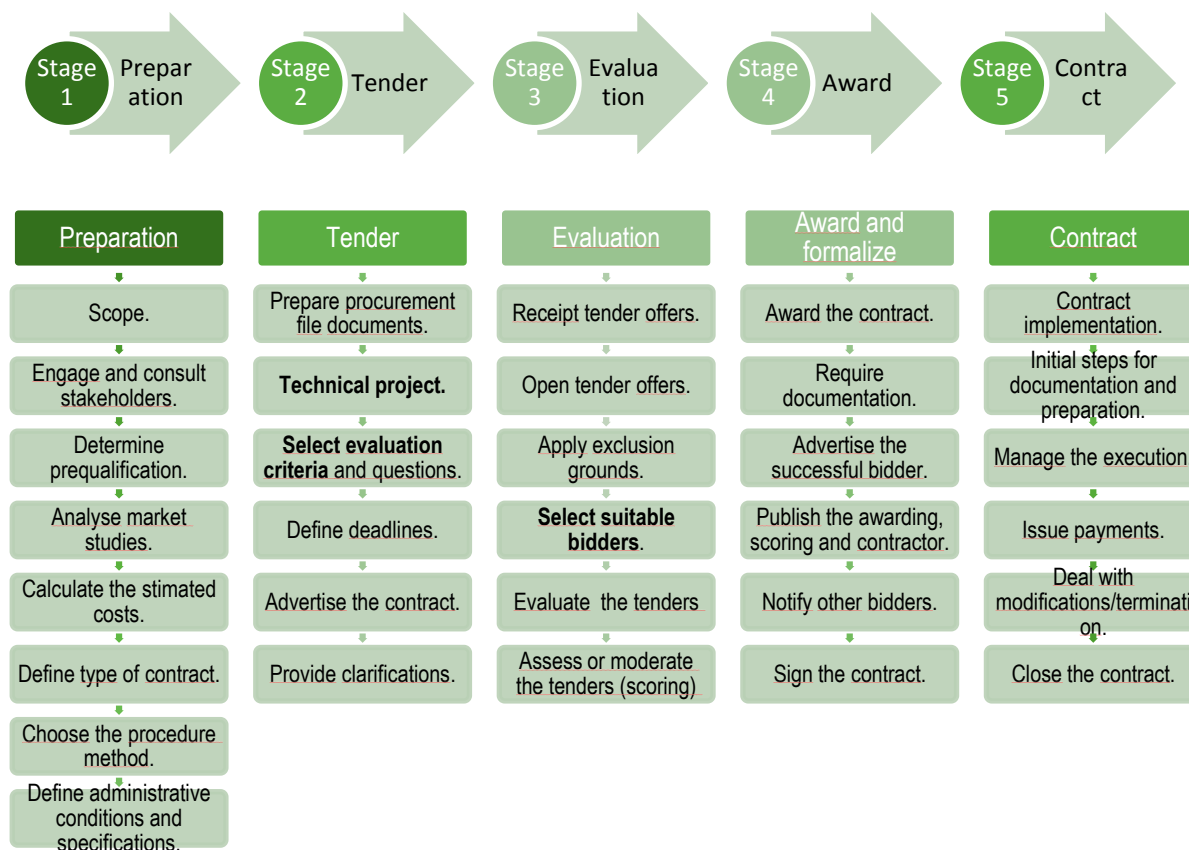


Figure 4.4: Five stages in the standard public procurement process for URBAN GreenUP (Source: own elaboration from “Public procurement guidance for practitioners” EU)

Highlighted in bold are the main Key stages of the Procurement according to the experience of the URBAN GreenUP cities:

- The definition of the Technical project. The technical project, procurement and construction are processes that are not independent from each other, that must be considered together.
- The selection of the Evaluation Criteria. The criteria can be used by the Local Entities to influence more sustainable and efficient techniques, not only in terms of price.
- Select suitable bidders: In some cases, it might be difficult to find and select a suitable contractor with capable technical and financial resources to deliver and implement the project in time.

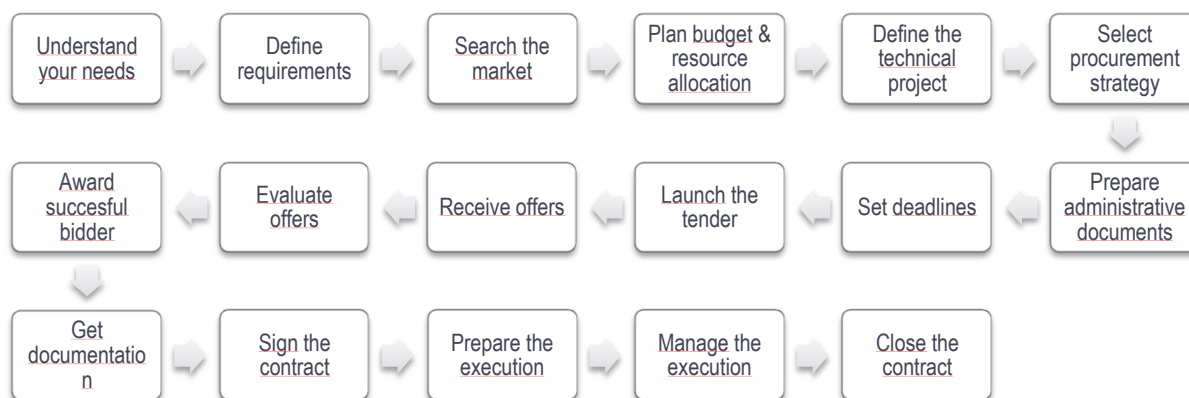
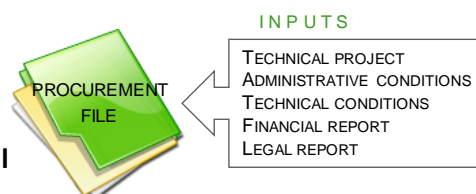


Figure 4.5: Flowchart of the stages in the procurement process (Source: Own elaboration, from “UN Procurement Practitioner’s Handbook”).

Phase 1. Preparation and planning

Tender documents

Before issuing a public tender, a number of documents must be prepared as part of an administrative file. The main documents are the **Technical Project** and the **Administrative and Legal Conditions**.



Technical specifications

A key part of any successful NBS implementation is a Technical Project that contains a clear statement of the goals, expected deliverables, and desired outcome. The project is the main technical-economic input to launch the tendering process. The project must define specifically the characteristics of the NBS. The technical project includes the technical implementation project and technical specification depending on the subject of the tender. The technical criteria for the goods, services and works to be procured shall be specified in the technical specifications, which constitute an integral part of the tender documents.

The municipality might need the support of external experts to draft the implementation project (subcontracting that task), although this can also be developed by public administrative technicians (business as usual).

The basic content of the technical project could be the following:

- Technical report.
- Location, general and details construction plans and drawings.
- Technical specifications document.
- Total budget, budget per item and/or budget per activity. Costing schedule.
- Time-line of works (*Work programme*).
- Health and safety requirements.
- Waste management.
- Geotechnical study.
- Maintenance specifications.
- References for the verification of the plans.

In some Minor Contracts the technical project can be replaced by a simpler Technical-Economic specification Report, in accordance with the scope and magnitude of the tender.

Procurement might be undertaken separately for design (project) and construction (execution) activities, through two consecutive procurement processes

Administrative and Legal conditions

This stage includes the research of the legal conditions (specified by the Legal Office) and the preparation of administrative specifications (specified by the Procurement Office), detailing all characteristics of the goods, services and works that constitute the subject matter of the procurement. The administrative information for the Tender includes details on the contract terms, and timescales, together with information on tender evaluation and scoring.

The administrative conditions include the following information:

- Form of tender. Type of procurement process. Type of contract.
- Characteristics for the procurers. Selection Organisational Questionnaire (SQ).
- Costing schedule. Maximum period for execution.
- Summary of contract particulars.
- Invitation to Tender (ITT).

Some of the most important administrative decisions to be taken are described as follows.

Division in lots

The criteria for dividing a contract into lots can be the following:

- Experience and technical skills. The same contract that includes different skills can be divided into lots. Where very different skills or specialised skills were needed for part of identified works the contracts can be sometimes divided into separate lots.
- Location of the activities. It is possible to divide into lots activities that are located in different locations. For example, interventions in the northern zone and interventions in the southern zone.

The maximum number of lots that a bidder can request can be limited in the tender administrative conditions: Contractors could bid for one or all lots.

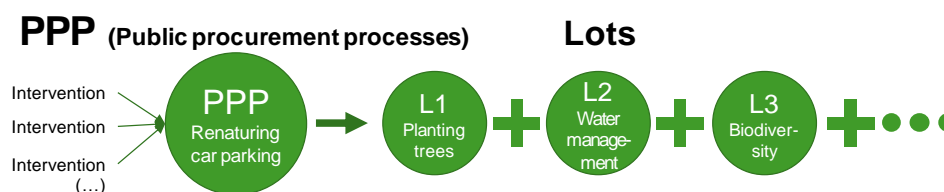


Figure 4.6: Division in lots.

What are the advantages of dividing the contract into lots? It facilitates access to the tender by small and medium-sized companies, as well as specialist contractors, who would otherwise not have the capacity to access larger contracts. This increases the competitiveness of companies and skills required.

What are the disadvantages of splitting the contract into lots? It can complicate administrative processes and risks, as well as result in losing some of the cost efficiencies in larger schemes.

Should I divide the contract into lots? To answer this question, you must first consider the local legislation on tendering. If there is no legislation, you should consider the decision-making trend in your local council. The division into lots facilitates access to smaller companies, but complicates the administrative process and implementation.

URBAN GreenUP experiences. Among the URBAN GreenUP cities we have found examples of two totally opposite experiences. Valladolid² has legal constraints which make it necessary to favour the division into lots, with the aim of facilitating access for small local businesses. However, in Izmir and Mantova the experiences are the opposite, due to improve effectiveness: not dividing procurement contracts in lots if it is not necessary. Although there are no criteria in the laws, it is the priority choice for the Administrations to complete the applications with minimum divisions. In Mantova, the contract last ten years, and managing the contract globally guarantees to optimize the processes, both from an economic and technical point of view, in particular for NBS. In other cities, such as Liverpool, Ludwigsburg and Binh Dinh, decision is taken case by case, in terms of economic and project management efficiencies, financial limitations and location.

List of interventions in Sub-Demo C

Re-naturing urbanization	Water interventions	Singular Green Infrastructures	Non-technical interventions
Cycle and pedestrian route in new Green Corridor	Culvert works for Peynircioğlu Stream	Green fences	Industrial Heritage Route along the Izmir Urban Green Corridor
Planting 4800 Cool & Shady Trees	Green pavements for Peynircioğlu Stream	Fruit walls	
Urban Carbon Sink			

SubDemo C interventions procured together in Izmir demonstration.



Figure 4.7: Implementation of SubDemo C in Izmir - Peynircioğlu Stream.

Criteria to evaluate the NBS procurement

Evaluation criteria for the goods, services and civil works to be procured shall be specified in the Administrative specifications document, which constitutes an integral part of the tender documents. The specified criteria promote both efficiency and functionality, and focus on removing aspects that could impede competition, ensuring equal opportunity for all bidders.

Criteria commonly used to evaluate the NBS proposals include price and non-price factors. If you consider including non-price factors in addition to the price factor, it recommend that these factors should be expressed in monetary values or relative scoring weights in tender documents, so that they are mathematically evaluable. This ensures objectivity and facilitates evaluation. The evaluation of technical criteria can be evaluated by a committee of experts through value judgement.

The relative weighting given to each of the assessment criteria must be included in the Administrative Conditions document for the tender.

² Instruction 1/2018, to promote socially efficient contracting: strategic, integral and sustainable in Valladolid City Council and its public sector entities. Article 35 (link [here](#))

Below are some assessment criteria that can be included in NBS tenders, according to the experience of the URBAN GreenUP cities.

Criteria		Description and examples	Weight*
Price / Cost		Contracting authorities shall base the award of public contracts on the most economically advantageous tender, understood as lowest price per unit or total costs for implementation. <i>Examples:</i> <i>Total cost for each number of deliverable, €/tree, €/planter, €/pollinator module.</i> <i>Cost per unit: €/m² vertical garden or €/m² fruit wall.</i> <i>Cost for category: Cost of second year sowing for pollinators (€), Cost for planting trees (€)</i> <i>Total cost for the whole budget: (Total €)</i>	From 60-100% to only 20%. On average, 50%-70%
Non-price factors	Increase in scope	Increase in the number of units with no additional cost. <i>Examples: plant a higher number of trees, increase km of cycle lane, increase green surface, add more pollinator's modules, increase m² of SUD. Rewarding criteria.</i>	From 10-20% to 60%
	Quality/experience	Quality of tenders submitted. This is assessed through the scoring of a set of standardised questions on issues such as experience, design, materials, sustainability (life cycle costs), maintenance etc.	From 0% to 50%-70%
	Reduce the execution time	The shortening of the project's execution time increases the effectiveness of the implementation. Establish the measure in calendar days or in working days. <i>Examples: Reduction of execution by 10 working days.</i>	From 0% to 10-20%
Weighting (0% - 100%)			100%

Table 4.4: Suggested criteria to evaluate NBS procurement.

*Suggested range for scoring each criterion. For most cities price criterion is higher (VAL, LIV), even 100% (IZM). However, other examples allocate a lower score, e.g. only 20% for the price criterion (MAN).

Rewarding criteria for sustainability proposals. The city of Mantova, in Italy, applies Rewards Criteria for projects with the best solutions within the technical proposal. The selection of the contractor is decided by assigning scores with 80% scoring on the improvements to the project proposal and 20% retained for economic efficiency. The Council can choose to apply several environmental criteria, for example considerations with environmental certification will score higher than one without certification. Another example is a consideration that uses low emission vehicles, has reduced consumptions of fossil fuels, or uses renewable energies. Other examples include environmental and quality certified products, or other social criteria.

Life cycle analysis and the cradle-to-cradle approach. The contract authority has the potential to award the proposed contract to the proposal with the best environmental criteria and life cycle analysis. This approach is not widely used except in a few of the project cities such as Valladolid, where it is supported through their local legislation on procurement (*Spa.-Instrucción 1/2018*). Other cities consider the sustainability criterion after tendering, and during the implementation phase (MAN). In Binh Dinh the life cycle analysis is already included in the technical specifications. Weighting for this aspect is suggested to range from 10% to 80%. *Examples: Distance between the supplier and the final destination.*



On the other hand, the city of Ludwigsburg, in Germany, promotes public procurers' services on cradle-to-cradle guidelines. Contractors must declare that they are committed to sustainability criteria in the cradle-to-cradle basic standard.

Preliminary market consultations

Before launching a procurement procedure, contracting authorities may conduct market consultations for expressions of interests, with a view to preparing the procurement and informing economic operators of their procurement plans and requirements. Advice from independent experts, market participants or from other authorities may be collected.

Phase 2. Tender publication.

Contract notice

Public tender offers are published on free and public access platforms, to provide equal opportunities and access to information. When implementing NBS in your city, you should utilise your country's public procurement platform, if it exists.

The following table includes the email addresses of some of the URBAN GreenUP cities' public contract publication platforms.

Country and partner	Public procurement platform
Spain (VAL)	Plataforma de Contratos del Sector Público (PCSSP) www.contrataciondelestado.es Perfil del Contratante del Ayuntamiento de Valladolid https://www.valladolid.gob.es/es/perfil-contratante
United Kingdom (LIV)	Contracts Finder (contracts over £10,000 for central government bodies and over £25,000 for wider public sector bodies. Limit for Liverpool CSO in £100,000) https://www.gov.uk/contracts-finder Liverpool's Council eProcurement system https://liverpool.gov.uk/business/tenders-and-procurement/ Due North Portal, Pro Contract https://procontract.due-north.com/Login
Turkey (IZM)	Electronic Public Procurement Platform: ekap.kik.gov.tr
Italy (MAN)	Piattaforma SINTEL for the Regione Lombardia https://www.arca.regione.lombardia.it/wps/portal/ARCA/Home/e-procurement/piattaforma-sintel
Germany (LUD)	Das Vergabe Portal für Deutschland: http://www.vergabe24.de/
Vietnam (BIN)	Bidding portal: http://muasamcong.mpi.gov.vn/

Table 4.5: Platforms for public procurement notice, national and local.

Phase 3. Evaluation

All documents required are presented by the bidders in a sealed envelope or by a registered email or platform. The presentation of proposals has a strict deadline (day and hour), of strict fulfilment. Proposals outside this period are not accepted. Once submitted, proposals cannot be changed. All the proposals presented on time will be listed and published.





Administrative information. This covers the basic organisational information about the supplier, such as the contact details, trade memberships, details of parent companies, group bidding and so on.

This also contain self-declaration(s) regarding whether or not any of the exclusion grounds apply, of if the company meets the selection criteria in respect of their financial standing and technical capacity (*Tender letter* about compliance, formally signed).

Compliance Requirements
PASS (compliance) / FAIL (non-compliance)

The proposals that do not comply with the administrative conditions, such as selection criteria, insurance, ability, references or company policies, will not be included in the evaluation stage and the proposal will not progress. If administrative information or a legal document is missing, the contracting authority might request it. Accepted proposals will be evaluated.



Technical-economic proposal. The bidder shares the proposal formally by complying with the technical and economic characteristics requested in the tender conditions.

Proposed price must be written clearly (*Costing schedule*). The financial proposal should never be higher than the maximum price limit set out in the administrative specifications.

The criteria for the evaluation of tenders are already defined in the initial administrative documentation. At this stage, the contracting authority evaluates all the proposals accepted in accordance with these criteria. The tender that obtains the highest score (0-100%) will be awarded the contract.

Country and partner	Administrative	Technical-Economic
Spain (VAL)	Envelope A. European single procurement document (ESPD)	Envelope B. Technical proposal. Envelope C. Financial proposal.
UK (LIV)	Quotation document. Organisational questionnaire.	Service Specification. Form of tender.
Turkey (IZM)	All documents required under the rules of participation in the procurement including the Tender letter and the Tender security shall be placed in an envelope.	
Italy (MAN)	Envelope 1. Administrative. Evaluated by a Commission composed by the responsible for the procedure and from two municipality officers of the contract office.	Envelope 2. Technical economic. Evaluated by another different Commission composed by experts in the subject of the tender.
Vietnam (BIN)	Technical Proposal Evaluation	Financial Proposal Evaluation

Table 4.6: Documentation for the evaluation of tender proposals.

Disproportionate proposals. The contracting authority shall evaluate the tenders and determine those that are abnormally low compared to the other tenders, or to the estimated cost determined by the contracting authority. The tender commission shall evaluate the abnormally low tenders taking into consideration the written explanations documented on the following aspects:



- a) economic nature of the manufacturing process, the services provided and the method of works,
- b) selected technical solutions and advantageous conditions to be utilized by the tenderer in supply of the goods and services or fulfillment of the works,
- c) the originality of the goods, services or civil works proposed.

In conclusion, it is possible to accept disproportionately low offers, if the price is well justified.

Stage 4. Award and formalize

The award proposal must be approved by the local government (governing board / councillor).

This phase includes the signing of the contract between the local authority and the successful bidder (contractor/supplier).

A bidding process can be halted and it is not compulsory to award a contract to any of the bidders. In this case, the tender must be repeated by reviewing the scope, characteristics of the bidders, the budget or other concepts to help encourage a successful re-tendering process.

Stage 5. Contract implementation

At this stage the execution of the contract with the contractor or supplier begins. There is a **Preliminary Phase** of a maximum of one month before the signature of the contract, in which the documentation for the execution of the contract is prepared. This includes:

- Master programme for the works execution, including time schedule and sub-contracting.
- Construction insurance.
- Health and safety plan and coordination.
- Application for licences and other permits.
- Waste management plan.
- Contracting of construction services, such as water or electricity.
- Conditions for Supervision / inspection.

The execution is managed in parallel by the Council (contract administration, such as control of costs and compliance with the contract conditions) and the Contractor (works management, such as certification of work executed, payments). The following diagram reflects this coordinated work among stakeholders.



Figure 4.8: Contract implementation and its relation with the public administration.

Contract modifications may be admitted in the technical specifications, but each change must be administratively documented. This process might delay the execution.

Once implementation has been completed, the contract must be closed after verification by the competent Local Authority.

4.4 Timescale for the public procurement

The local authority and municipal supervisor, as well as the Procurement Department if one exists, should legally determine the minimum time scale for procurement. All stages of the process must be completed and approved by the contracting authorities. The minimum execution times must also be respected (legal timing).

Procurements above the EU thresholds must comply with the standard timescales for procurement. For procurements below the thresholds the Council has discretion to apply their own timelines providing they are reasonable and proportionate.

It is hard to establish a standard timescale on the various stages for all types of procurement that are valid for several cities. What is certain is that bidding processes, especially through the open procedure, can be long and challenging.

- City experiences of public procurement show that tendering could last **from 4-5 months up to 12 months**, depending on complexity, approvals, other partner agencies and willing stakeholders. However, we have also gathered experiences from tendering processes carried out in 45 days.
- The execution of the contract depends very much on the type of contract and the complexity of the work, including unforeseen events. On average, the execution of work takes between 5 and 12 months.
- Finally, once the work has been completed, there is a final phase of Contract closure, which lasts another month.

The following diagram comprises the basic phases of the public procurement process and includes an average on the duration of each period in real terms based on experience of the URBAN GreenUP cities. This diagram is also a reference that represents the whole procurement process for an open procedure.



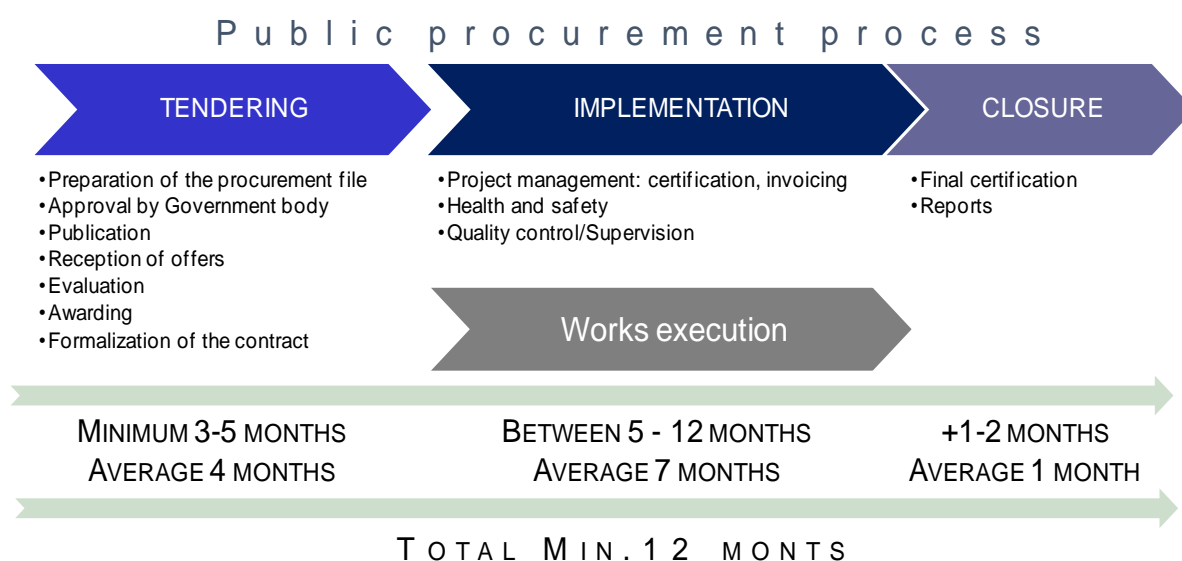


Figure 4.9: Public procurement process schedule diagram.

Note: Schedule is based on experience from the FR cities, not according to legal timing.

Annex I explains by way of example the detailed phases of a standard open tendering process for a works contract, with an approximation of the duration of each phase, according to legal timing and experience from the implementation of Nature-based solutions by the URBAN GreenUP cities. Annex I should only be taken as a reference, because each city will have a slightly different process and approach.

See *Annex I. Standard schedule of Works contract by open procedure.*

5 Financing nature-based solutions

5.1 Financial bodies and instruments

The search for funding to implement NBS by local entities is one of the main points of concern. Finance is usually provided by public bodies, but can also be available through private organisations and communities/citizens, as well as through other wider stakeholder collaboration agreements. The underlying reasons and drive to fund urban NBS depends on who is providing financing:

- **Public bodies:** Financing to minimise or rule out the risks associated with the effects of climate change (water retention, urban heat). Public bodies are the main source of NBS funding today.
- **Private firms:** Whose main goal is the real estate value capture & stewardship. External, profit-seeking finance does not play a significant role in the NBS funding. Real estate developers can sometimes contribute through the use of innovation grants.
- **Citizens/communities:** With a symbolic & educational value.

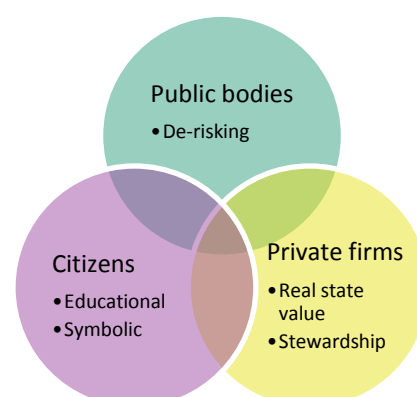


Figure 5.1: Sources of funding NBS in cities and their main value propositions
(Source: Prepared by the author based on Naturvation project).

Types of value	Source of investment		
	Public organisations	Private organisations	Communities / individuals
Water retention	Municipal subsidies to stimulate green roofs	Investment into green roofs as part of building requirement	Crowdfunding of neighbouring roofs
Health value	UFF: Matched funding for tree cover on private urban areas	Increased employee health through multifunctional green roof	
Biodiversity	Innovation subsidies for real estate development with biodiversity		
Stewardship	Funding for bee health monitoring (Urban Observatory)	Adopting biodiversity goals	Crowdfunding of neighbouring roofs with a view
Monitoring		Investment into bees as immission monitoring indicators	
Aesthetic value		Green roofs for added customer value (i.e. higher rent)	
Symbolic value			(Adopt) meaningful / specific trees, bees and gardens; tree mapping
Educational value			Gardens, plots, bees for building (child) awareness & stewardship
Social capital			Reducing anti-social behaviour using bees; donations for common cause
Sale of produce			Honey sales

Figure 5.2: Types of value x Investment Sources (Source: Naturvation project. How to finance Nature-Based Solutions? www.naturvation.eu).

Possible financial instruments for the implementation of the Nature-based solutions are the following, which are classified into instruments for public organizations, private organizations and communities (citizens).

Financial instruments for the NBS implementation		
Public organisations	Private organisations	Individuals / communities
Public organizations. Bank loans. Green bonds. Innovative investments funds. Public-private collaboration.	Private organization. Private investors. Bank loans / equity (real estate development); Institutional investors (pension funds).	Donation & reward crowd-funding. Lease (greening as a service). Subsidies / tax breaks for households. Access to bank loans? Mortgage incentives (like Energy label).

Table 5.1: Financial instruments for the NBS implementation (Source: Naturvation project)

5.2 Financial planning

Financial planning is the task of determining how the municipality will afford to achieve its strategic goals and objectives on renaturing the city and implementing the RUP defined.

Proper planning of the costs for the implementation, operation and maintenance of the NBS before, during and after installation ensures the survival of interventions.

This plan includes the economic analyses of the general budget needed to implement the RUP. This means that it is necessary to quantify the cost of the NBS being implemented across an investment calendar or within an investment timescale.

The financial plan should set out a schedule for funding in accordance with the implementation timetable. This strategic document sets out the Council's priorities for the following year(s).

Short-term financial plan (year): The Annual Financial Plan is presented every year by the City Council and is used to guide and inform budget and financial decisions. So firstly, funds must be allocated annually to local budget lines, which must be spent within 1 year.

Medium-term (5-10 years) and long-term financial plan (10-20 years): Likewise, municipalities also develop medium (e.g. five years) and long-term financial plans (e.g. 2030 & 2050 horizons). These financial plans provide a framework for medium and longer-term financial decision-making, including strategies and key actions to facilitate multi-year, integrated, strategic decision-making. These should also consider the allocation of funding for the RUP implementation according to the strategy of the city (political future vision).

Robust economic planning includes two fundamental aspects: the financial plan and funding opportunities.

5.2.1 Financial plan

The prospective financial statements are the economic analyses of the costs to deploy the RUP in terms of schedule. Life-cycle costing shall cover parts or all of the following costs over the life cycle of a product, service or works: (i) costs relating to acquisition, (ii) costs of use, such as consumption of energy and other resources, (iii) maintenance costs, (iv) end of life costs, such as dismantling, disposal or recycling costs.

The procurement proceedings shall not be initiated unless there is a sufficient budget allocation for the whole life-cycle of the NBS.

Budget breakdown for the NBS construction

Construction works must consider expenses related with general expenses, industrial benefit and other services related that must be considered in full when budgeting the NBS procurement processes. This section describes an example of those concepts and the ratios that might be implemented, as an illustrative example.

The construction costs of NBS for the public administration are higher than the expected costs of the technical project budget (CB). The following breakdown gives an example of the initial budget of engineering project, how to add up other items of expenditure, which can on occasion even double the initial budget of the execution project. This example shows how important it is to consider all the expenses associated with the execution of a construction project, in order to confidently calculate very well the total budget needed.

1. SUMMARY OF TENDER BUDGET (TB)

Construction project budget (CB)		100.000,00 €
General expenses (13%) (GE)	13%	13.000,00 €
Industrial benefit (6%) (IB)	6%	6.000,00 €
TENDER BUDGET without VAT (TB)		119.000,00 €
VAT (18% - 21%) *	21%	24.990,00 €
TENDER BUDGET WITH VAT (TB with VAT)		143.990,00 €

2. TOTAL BUDGET FOR THE PUBLIC ADMINISTRATION (TB)

Construction project budget (CB)		100.000,00 €
Tender budget (PC)		119.000,00 €
Design fees (construction Project) (3% -10% CB, Average 5%)	5%	5.000,00 €
VAT (18% - 21%) *	21%	1.050,00 €
Project management (PM) (5% -15% CB, Average 5%) – Architect/Engineer – Technical architect/Building engineer	10%	5.000,00 €
VAT (18% - 21%) *	21%	1.050,00 €
Quality control, Inspection or Supervision (2,5% CB)	2,5%	2.500,00 €
VAT (18% - 21%) *	21%	525,00 €
Health and Safety coordination (0,465% CB)	0,5%	500,00 €
VAT (18% - 21%) *	21%	105,00 €
TOTAL BUDGET FOR THE PUBLIC ADMINISTRATION (with VAT)		159.720,00 €

Planning permission/licenses	tbc	site/project specific
Site establishment	10%	
Contingency / Optimism bias	7-10%	
Survey	10%	
Financial downturn of the tender offer	-(10-20%)	saving
OTHER COST CONCEPTS	+/- (10- 20%)	

Table 5.2: Budget breakdown for the construction of NBS. Practical example.

Legend: (*) VAT. Check the % VAT according to your national legislation. F.e. [VAL, LIV] VAT 21% [IZM] VAT 18%.

It is worth mentioning that construction projects have a continuous need for alterations, which could result in additional costs. For this reason, some organizations reserve an additional 7%-10% budget as an emergency bag for contingencies.

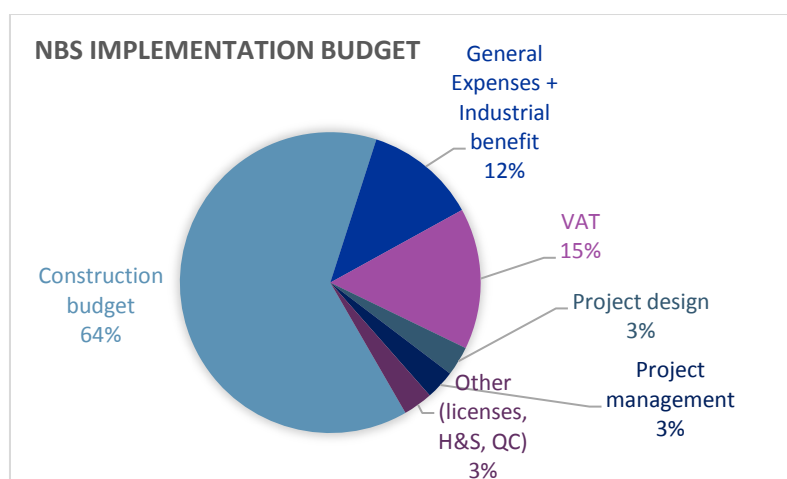


Figure 5.3: Representative chart of budget for the NBS implementation.

Official price basis

The economic specifications of a project must be delivered in relation to the unit costs of a Prices Base recognised by the Local Authority. There are several Price Bases available in the national market. Project designers must handle the Price Bases that is used by the Local Entity where the NBS will be implemented.

Some examples are: In Germany, mandatory rates for architects' and engineers' fees called HOAI (*Ger.- Honorarordnung für Architekten und Ingenieure*). In Spain, Guadalajara Price Base is one of the most common price basis at national level (*Spa.- Base de precios Guadalajara*), but there are others like Landscape Basis (*Spa.- Base Paisajismo*) and Construction price basis (*Spa.- Base de precios de la construcción*).

Maintenance of NBS

Once the RUP is implemented through the construction of NBS, the solutions will need to accommodate periodic maintenance. One of the main mistakes and concerns for the public administrations are the costs for maintenance. *«The question of maintenance can also be a ground for conflict when responsibilities and budgets are not clearly defined in advance. There are existing cases of NBS where insufficient funds have been allocated for maintenance and/or the responsibility of maintaining the infrastructure was not clearly assigned between the various city departments. The resulting lack of maintenance hinders the functionality and performance of NBS, creating an even more challenging climate for NBS acceptance»* (Source: European Commission).

In the URBAN GreenUP cities, maintenance costs will be mainly supported by local funds, through business-as-usual works but also through subcontracting. Further innovative alternatives for maintenance are being analysed, such as sponsoring initiatives.



Figure 5.4: Life-cycle costs for the implementation of Nature-based solutions.

Business model canvas

The URBAN GreenUP project develops a Business Model Canvas, which is a tool that cities can adopt to define a business model for NBS implementation (see *D7.4 Guidelines for the use of financial instruments and to design business models to implement NBS*, www.urbangreenup.eu).

The canvas identifies 13 steps for the definition of an *ad hoc* business model. One of them is the “definition of the cost structure”, which is a linked concept of financial planning, described in this report. The cost structure includes the capital expenses and maintenance costs. *Capital expenses - are incurred to acquire fixed assets or add value to them in view of creating future benefits. The benefits derived from capital expenditure extend beyond the accounting period of the actual spend. The assets acquired in question might be tangible or intangible.*

5.3 Funding opportunities

Several studies have been developed based on the analysis of financial instruments application at city level. For example, the European Environment Agency (EEA) have analysed several financial mechanisms aimed to implement adaptation measures to fight climate change in cities. EEA stated (EEA, 2017) that financing for local adaptation can be available through three main sources:

1. Governmental sources (grants, EU funding instruments, national, regional and local/municipality budgets);
2. Banks and other financial institutions (loans or guarantees);
3. Private stakeholders (crowdfunding, green bonds, etc.).

UN-Habitat in the *“Finance for city leaders handbook”* (UN-Habitat, 2017) report proposes another classification of the financial instruments that cities can adopt for the realization of several projects. These include local government-based financing options (e.g., general obligation bonds, revenue bonds, green bonds), development exactions (e.g., linkage fees, impact fees), public and private options (e.g., public–private partnerships [PPPs], pay for performance), and mechanisms to leverage the private sector (e.g., loan guarantees, tax increment financing).

Government-based finance options	Development exactions	Public and private options	Private sector leveraging
General obligation bonds	Dedication requirements	Public–private partnerships	Loan loss reserve funds
Revenue bonds	Linkage fees	Pay for performance	Debt service reserves
Industrial revenue bonds	Impact fees	Securitization and structured finance	Loan guarantees
Green bonds		Catastrophe bonds	On-bill financing
Qualified energy conservation bonds			Pooled bond financing
Social impact bonds			Pooled lease-purchasing finance
Public benefit funds			Tax increment financing
Linked deposit programs			Value capture
Energy efficiency loans			
Property-assessed clean energy programs			
Greenhouse emissions allowance auctions			

Figure 5.5: Municipal finance tool (Source: UN-Habitat)

In the deliverable D7.4 of URBAN GreenUP project a categorization of the financial instruments for NBS has been defined. Based on the literature review that has been conducted, on the features and characteristics of NBS and on the international case studies analysis, the table below summarises the financial instruments that are suitable for the implementation of NBS in cities. The financial instruments that have been identified are categorised into two groups:

- ON-BUDGET: instruments which are directly included in the municipal budget like municipal ‘green’ bonds or social impact bonds;

- OFF BUDGET: instruments for sustainable project financing channel funds with no direct impact on the municipal's budget.

At the same time, a distinction between innovative and traditional financial instruments has been performed.

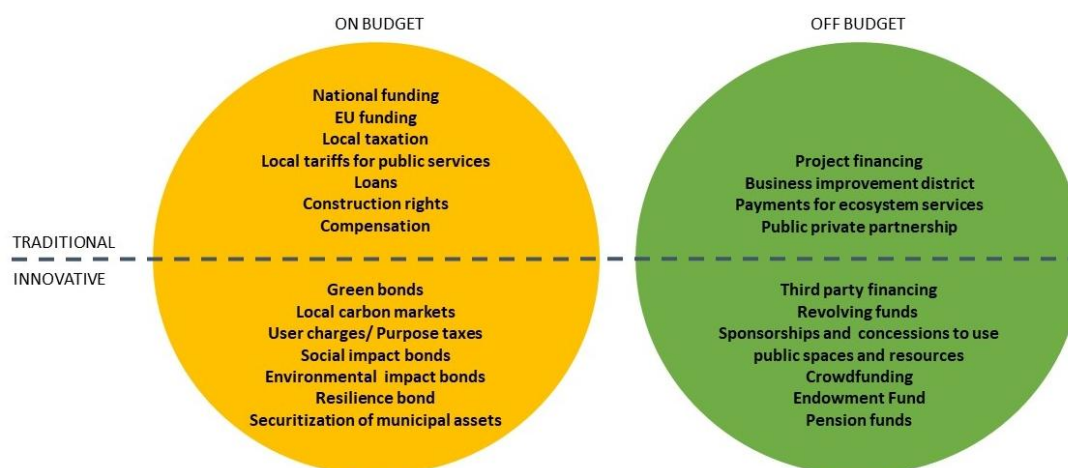


Figure 5.6: Financial instruments for NBS categorization (Spurce: D7.4, based on Croci and Colelli, 2017)

The above-mentioned mechanisms have been described and analysed. Per each instrument, an exhaustive explanation about the main characteristics has been provided and several case studies have been associated to each financial instrument.

5.3.1 Sources for NBS funding

A key limitation to the RUPs development is the lack of specific funding specifically for nature-based solutions. Therefore, it is key to first identify potential sources of funding, and then to articulate the benefits that the RUP promotion can offer to the multiple funders.

Public funds usually are routed and prioritised politically towards health, education and other social issues and environmental projects are left behind. It is important to identify and **highlight the multifunctional benefits of NBS** and their socio-economic benefits in particular. This is to make it clear that this is not a dispute between public spending for social or the environment, but offers an intelligent, holistic solution of both social and environmental benefit (Source: Nature-based Solutions Handbook. ThinkNature Platform).

Some of these funding opportunities are quite innovative and maybe some local authorities need to implement specific regulations in order to manage them.

The graph below shows the frequency for various forms of funding sources that have contributed to financing NBS across Europe. This data considers the frequency of these financing sources from a total 1,000 NBS which were analysed. As can be seen, most of the NBS have been totally or partially publicly funded. However, some types of NBS are more usually financing with private funds. That is the case of the NBS sets in green indoor areas and external building's greens infrastructure (Source: Urban Nature Atlas. Naturvation project).

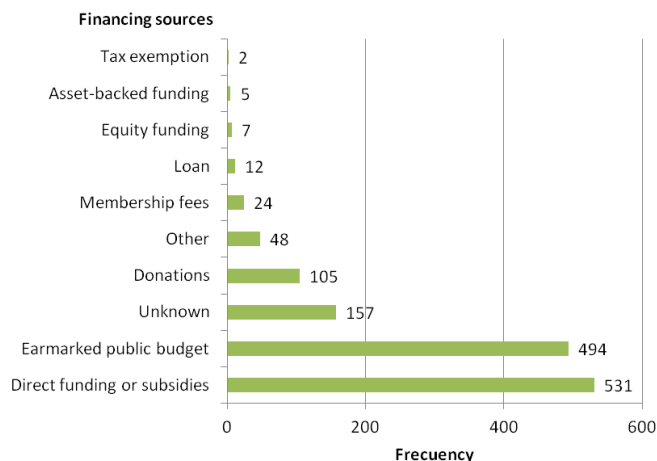


Figure 5.7: Frequency of funding sources for NBS actions (Source: Urban Nature Atlas. Naturvation).

Nevertheless, economic opportunities for NBS funding are diverse and mainly involve public budgets and subsidies, as well as private investment as traditional ways for funding. However, new innovative approaches should be addressed.

The next table shows some examples of funding opportunities for implementing NBS projects collected from experience, as well as other NBS Horizon 2020 projects. The table contains general funding opportunities from international, national and local funds. Also included are some more specific actions taken from NBS projects and other sources.

Public funding: International funds	
Funding opportunity	More details and examples
World Bank NBS program (W) 2017 www.naturebasedsolutions.org	NBS for disaster risk management programme.
Natural Capital Financing Facility (NCFF). European Investment Bank (EIB) and European Commission initiative www.eib.org (W)	Financial instrument that supports projects delivering on biodiversity and climate adaptation through tailored loans and investments, backed by an EU guarantee. Call for projects. Lend to public and private sectors.
Other initiatives - <i>International Union for Conservation of Nature (IUCN)</i> (W) www.iucn.org/theme/nature-based-solutions	Guidance, principles, best practices. IUCN Global Standards for NbS www.iucn.org/theme/nature-based-solutions/resources/iucn-global-standard-nbs Donors and financiers can invest in NbS with the Global Standard as a benchmark, minimising risks and providing increased security ⁽⁵⁾ . All user groups across the public and private sectors can also further engage with the governance structure of the Global Standard, which connects stakeholders worldwide and ensures via feedback that the Global Standard is used for its full potential to mainstream NbS ⁽⁵⁾
Horizon 2020 and Horizon Europe (EU)	URBAN GreenUP project www.urbangreenup.eu NAIAD project www.naiad2020.eu
LIFE+ Climate actions (EU)	GAIA mechanism - Green Area Inner-city Agreement. Life + project GAIA 2010-2013 www.lifegaia.eu . Used financial compensation for the carbon footprint of businesses as the main driver for action. Financial compensation was used for tree planting and maintenance in Bologna, Italy.
European Structural and Investment Funds > European Regional Development Fund (ERDF) (EU)	C3-Alps project - Capitalising Climate Change Knowledge for Adaptation in the Alpine Space programme www.c3alps.eu
Interreg programme (EU)	Indnatur project www.indnatur.eu Interreg Poctep for renaturing industrial state Spain-Portugal
Urban Innovative Actions (UIA) (EU)	UPPER project - Urban Productive Parks for the development



Topic: Sustainable use of land and nature-based solutions www.uia-initiative.eu	of NBS related technologies and services. Latina IGNITION project - Innovative financing and delivery of natural climate solutions. Greater Manchester
COST Actions - European cooperation in science and technology (EU)	CircularCity project www.circularcity.eu Connecting cities for NBS
Public funding: National funds	
Government initiatives and approaches: Environment Department funding. Climate Department funding. Energy Department funding. ⁽⁴⁾	Urban Tree Challenge funds (UK) Lottery Funding (UK) Rural Development Regional Programme (Italy) Kommunalrichtlinie (Germany) Klimaschutz Plus (Germany) KlimOpas (regional Ludwigsburg)
Subsidy regimes to the private sector	Public payments for public goods. Link subsidies to better environmental performance. For instance, more subsidies in agriculture by the implementation of NBS.
Public funding: Local funds	
Use of public budgets ^{(1) (3)} Assumption of small scale, low-cost interventions and lower maintenance costs, the overall budget relatively low (ex. green strips, ecological partings lots) ⁽⁴⁾	Local funds examples: Chapter 609 - Budgetary management (Valladolid). Section 106 funding (Liverpool). Natural Choices for Health and Wellbeing programme, Liverpool, UK – Funded by the Liverpool Primary Care Trust. Municipality own budget (Izmir). Natur- und Umweltschutzprogramm Ludwigsburg (Ludwigsburg).
Cross-departmental budget ⁽³⁾	Business as usual activities in the Council
Local tariffs (users paying for specific services)	Charges on the use of 'grey' infrastructure ⁽²⁾ Payments for Ecosystem Services ⁽²⁾
Specific taxes or tax reductions for NBS implementation. Tax exemption ⁽¹⁾ Tax increment financing (TIF) ⁽³⁾ Greening fiscal policy can lead to private investments ⁽¹⁾	Earmarking local taxes for green infrastructure, such as Parking fees. Research-Private Partnership (>50 years lease contract which contribute annual city tax revenues used for NBS construction) (f.e. Raingardens and roofs) ⁽⁴⁾ TIF initiatives in United States.
Offsets for residual impacts on biodiversity / green infrastructure ⁽²⁾	
Accessing external funding sources: Carbon footprint ^{(3) (4)}	Local companies pay a financial compensation for their carbon footprint (parks, green strips and street trees) ⁽⁴⁾
Savings from the use of ecosystem services provided by NBS ⁽⁵⁾	Estimated global benefits in ecosystem services from nature-based solutions focused on climate, such as Rain water management projects. NBS investments can be useful as a revenue to co-finance GI and NBS projects ⁽⁴⁾ .
Green bonds ⁽³⁾	Climate bonds (fixed-income instrument)
Revolving funds ⁽²⁾	Government and non-profit operations.

Table 5.3: International, national and local funding opportunities for NBS.

Legend: W: world. EU: European Union. UK: United Kingdom.

Legend: Data sources (1) Nature-based urban innovation – NATURVATION project. GA No. 730243; (2) Green Cities for Climate and Water Resilience, Sustainable Economic Growth, Healthy Citizens and Environments - GROWGREEN Project. GA No. 730283; (3) Urban Nature Labs – UNALAB Project. GA No. 730052; (4) Nature4Cities Project. GA No. 730468; (5) International Union for Conservation of Nature (IUCN); (6) Oppla the EU Repository of Nature-Based Solutions.



The following table describes private, social and other funding opportunities for NBS. Examples from the URBAN GreenUP project and other Horizon 2020 NBS projects are included as well.

Private funding	
Funding opportunity	More details and examples
Bank loan ⁽¹⁾	Bank loans for implementation of NBS.
Private investors.	Sustainable business models for NBS.
Asset-backed funding ⁽¹⁾ . Equity funding ⁽¹⁾⁽⁴⁾	
Developing Business Improvement Districts (BID) ⁽²⁾⁽³⁾ and Special Assessment District (SAD) ⁽³⁾	BID and SAD for the renaturalization of the area. See Glossary > Concepts definition for further descriptions.
Engaging with local businesses through green barter ⁽³⁾	
Mobilising investment from municipal enterprises / utilities ⁽³⁾	
Social initiatives	
Membership fees ⁽¹⁾ The project is financed by the municipalities through a membership fee ⁽⁴⁾	Implementing greening gardens and de-soiling initiatives ⁽⁴⁾ . Costs of the maintenance are carried out by the inhabitants and the housing corporation, as part of regular service fees of the building, and is managed by the Homeowner Association. ⁽⁴⁾
Land owners private funding	The potential of increased house prices can also motivate home owners to contribute financially to local community forest projects.
Crowdfunding Raising funds for a project (usually of public interest) through the donation of small amounts from a large number of individuals.	Rooftop Revolution: a crowdfunding site launched in 2016 in the framework of the Amsterdam's Rooftop revolution for greening the city.
Philanthropic contributions. Donations ⁽¹⁾	
Lottery events for financing small interventions at local or neighbourhood level ⁽⁴⁾	Strategic actions flood related ⁽⁴⁾
Other co-creation and co-production initiatives <i>*those not classified above</i>	
Other innovative initiatives	
Public-Private Partnership (PPP). This kind of alliances creates more favourable conditions for both parties in terms of investing in NBS. ⁽²⁾⁽³⁾ The climate adaptive initiatives are financed by a combination of public and private investments. The city Administration and the utility company via taxes and revenues from charges, together with investments from private land and homeowners (e.g. Greening gardens and de-soiling) ⁽⁴⁾ These partnerships are encouraged by external funding programmes (e.g. EU funding) ⁽³⁾	PPP Partnership agreement for the construction of green infrastructure in a private building ⁽⁷⁾ . Co-funded budget for the process management and support services ⁽⁴⁾
Oppla: Connecting stakeholders through an open platform that is designed for people with diverse needs and interests ⁽⁶⁾	Oppla the EU Repository of Nature-Based Solutions

Table 5.4: Private, social and other funding opportunities for NBS.

Legend: Data sources (1) Nature-based urban innovation – NATURVATION project. GA No. 730243; (2) Green Cities for Climate and Water Resilience, Sustainable Economic Growth, Healthy Citizens and Environments - GROWGREEN Project. GA No. 730283; (3) Urban Nature Labs – UNALAB Project. GA No. 730052; (4) Nature4Cities Project. GA No. 730468; (5) International Union for Conservation of Nature (IUCN); (6) Oppla the EU Repository of Nature-Based Solutions. (7) URBAN GreenUP project.



6 Practical information

6.1 Tips and recommendations for newcomers

The table below lists some of the advice provided by professionals from the URBAN GreenUP cities who have already implemented NBS in local authorities. These are the key areas where officers would seek to make changes if they were to repeat the process again. All advice is based on experience.

Tips and recommendations	Explanation
Multidisciplinary team	NBS implementation is a transversal discipline, so the municipality should create a transversal and multidisciplinary team in the city council, whose members should adapt to speak a common language. Seek different ways to get the end result – ignore all initial refusals that you might find and pester people to help when needed.
Legal advice	Go to the legal department of the city council for professionals to identify all applicable regulations. Arrange a multidisciplinary team within the City Council, which mixes technical (design and implementation), legal (regulations) and administrative (procedures) capacities, using an integrated narrative.
Permitting plan	The implementation of some interventions requires permits from other bodies. It is recommended to consider the need for permits well in advance. For example: Permission for water management from the basin organisation, as soon as possible.
Financial plan	Plan budget requirements in advance so that they are compatible with the annual items. Consider the whole life process costs from construction to maintenance costs. Establish a clear budget at the beginning and get your finance team to help you monitor spend accurately. Procurement proceedings shall not be initiated unless there is a sufficient budget allocation for the whole life-cycle of the NBS.
Procurement support	An expert with experience in public tendering will help you identify the best tendering process for your project, determine the suitability of the division into lots and establish the best evaluation criteria. These are the critical points in bidding decisions. On the other hand a tendered can consult the FAQ section of the procurement public websites. Some municipalities shall provide further explanations contacting directly with them.
Group the NBS in the same procurement processes	It simplifies the execution by minimising the number of public tendering processes, which are complex, as well as facilitating the coordination of the works and the integral execution.
Ease the tendering opportunities to local providers	Design simple tendering processes of limited scope to facilitate access to opportunities for small and medium-sized enterprises at or near the local level.



Extensive time schedule	Every step for the NBS implementation takes more time than you think. Consider ample deadlines in your calendar. Secure enough quality dedicated support to help maximise the benefits from each intervention, with more community consultation, more involvement from other city council departments, as well as, the ability to seek match funding and/or engage new partners.
Lack of support and experience	As the NBS implementation is new and unfamiliar for many local entities, be prepared to do parts of other people's jobs as well to make things happen because many colleagues will need encouragement to progress your plans. However, consider that there may not be enough capacity to support you. Finally, as the processes will be new, you will have to make your own way.
Community engagement	Explain all the details of the projects to the citizens before you start the implementation, especially to those directly affected by the NBS interventions.
Weather conditions	As NBS are based on nature, vegetation planting is restricted by seasonality, so ensure the seasonally suitable climatic conditions of your implementation process, are articulated clearly and practically within the tendering schedule.

Table 6.1: Tips for the cities in the NBS public procurement processes

6.2 FAQ Questions and Answers

Question: How to classify a contract into works, supply or services if it is mixed?

Answer: When the implementation of the NBS is a combination of several types of procurement (works, services or supplies) in one procurement procedure, the rules applying in that case are those applicable to the type of procurement corresponding to the main subject matter of the contract. The main subject is measured in terms of % over the budget.

Question: What are the key stages for the NBS implementation?

Answer: There are many key stages, but some cities agree that one of the most important elements is the Technical Project, because all the tendering process will have a connection with the Technical project, e.g. preparation of procurement documents, quality of constructors, the estimated cost of the tender etc.

On the other hand, selecting adequate evaluation criteria for the proposals is also considered a key stage, where technical criteria, other than price, are considered.

Question: Should I divide the contract into lots? With what criteria?

Answer: First consult the local public tender laws and regulations for the requirements for the division into lots. Although there are no legal requirements, the contract can be divided into lots if it contains elements that are located in different locations, or if they can be divided by the expertise of the different types of activities. For example, one lot for the performance of civil engineering work and another lot for gardening work. However, there are municipalities whose trend is not to divide procurement contracts in lots.



Question: How do you know what detail to specify to get good tenders for some of the NBS? such as the floating island or which type of green wall

Answer: You can use external consultants to help you articulate and assess the tenders. You can also use soft market testing feedback and information provided by suppliers which detailed key aspects of their products on web sites, etc. Ensure that this approach is legally acceptable within your local laws and procurement policies.

6.3 Challenges and barriers

The procurement and contract administration process are prone to risks, which may deliver in negative consequences for the public administration and the tenderer. Risks could be treated as potential barriers. Potential barriers initially identified include delays in the different stages, money wasted, time lost, lack of support from officials, complaints from tenderers or legal actions. The risks can be handled by implementing preventive actions.

Some of the challenges that the URBAN GreenUP cities have experienced in procurement and other processes for implementing NBS at the local level are as follows.

LEGAL CONSTRAINTS

- Possible lack of ordinances and local regulations related with NBS.
- The NBS installation in private properties means time issues on agreements, as well as in legal issues.

ADMINISTRATIVE CONSTRAINTS

- Very slow periods for public tendering and processing. Legal reviews might be delayed by months due to insufficient in-house capacity.
- Possible delays due to some missing administrative tender document or processing issues.
- Difficulties of coordination between several departments of the same local entity. Lack of support among civil servants in the City Council, as this is more work for them and in an unfamiliar area.
- Lack of expert technical personnel within the municipality for specific works.
- Lack on local information or this is not updated when planning. E.g. Despite previously checking and testing there was no electricity to one of the lampposts identified which meant procuring an additional battery.

TECHNICAL CONSTRAINTS

- Difficulties finding skilled suppliers in the local area, for both staff and equipment. You might need to organize seminars and conferences on NBS and resilience.
- Difficulties in choosing the ideal location: With sufficient visibility, accessible by citizens, in places of impact, without public underground parking, without affecting underground services such as electricity, water or telecommunications, outside heritage areas protected by Urban planning, etc.



- Difficulties in choosing the best technical solution and design among the many possibilities. For example, for the trees' species selection, you need to consider issues such as Aphids or pests, falling leaves, sticky fruit, any fruit, not too big, not too small, wind tolerant, salt tolerant, pollution tolerant, low maintenance, not overhanging roads, native, biosecurity, etc.
- External works can influence and affect NBS delivery e.g. collapsed drain at the same NBS site. Need for coordination with other municipal and private works in the same location.
- Responsibility for maintenance. Lack of experience in maintenance by local companies and the City Council staff itself.
- Errors in NBS maintenance planning. Difficulties in economically valuing the maintenance of this type of new interventions. Need to address enquiries around ongoing maintenance.
- Difficulties in vegetative manufacturing and maintenance processes, especially in vegetative landscape projects.

ECONOMIC CONSTRAINTS

- Limited access to funding. No general fund for everyday things or quick purchases/services.
- Increase in the budget necessary for implementation, with respect to the value of the tender contract, due to unforeseen circumstances. You can experience difficulties in budget management, due to extra manufacturing expenses.
- Managing the project budget with variable exchange rate differences.

SOCIAL CONSTRAINTS

- Resolving citizens' enquiries about why other areas do not receive NBS and are not benefiting.
- The problems experienced by the local people during the manufacturing process and their opposition to some practices, as well as dealing with and responding to their complaints.

POLITICAL CONSTRAINTS

- Political changes and differences of opinion on some schemes.

6.4 Lessons learnt

This section is based on all the experiences and lessons learnt that made the URBAN GreenUP cities stronger in terms of both public procurement and in the supporting administrative processes for the implementation of NBS in general.

- 🌱 Public tendering processes can be slow and complex. Plan the implementation of NBS according to a schedule adapted to the duration of the processes, according to your local legislation but also on experience and real timing.
- 🌱 Plan carefully the annual financial plan for the RUP, to ensure budget execution within the same fiscal year or in a mid-term basis.



- 💡 The technical project, procurement and construction are processes that are not independent from each other, but must be considered together.
- 💡 Design and deliver skills don't always exist within the same company and tenders may need to reflect that. You may need a tender for the elaboration of the technical project and another tender for the construction/execution
- 💡 Rely on the support of experts in each subject: technical, legal, procurement.
- 💡 Count on a multidisciplinary team if possible within the same department, because depending on staff from other areas might mean delays.
- 💡 You will face the difficulty of coordinating with different units within the municipality. Partners can be hard to work with, staff turnover can happen and some are slow to reply or change their mind or raise their costs... keep smiling!
- 💡 Strengthen and promote the integration of NBS into local urban plans and investment plans to mitigate adverse impacts of environment and climate change.
- 💡 Make tenders easier for companies. The full administrative content of tenders can drive potential bidders away. This can lead to lower quality bids, or fewer bids being received.
- 💡 Tender scoring criteria must be clear, easy, numbered and preferably mathematically quantifiable. Seek for clarity on responses expected.
- 💡 Allow time and resources for the unexpected. For example, a procurement challenge from an unsuccessful contractor and then new fire regulations were brought in that involved additional calculations, approvals and higher costs.
- 💡 Unexpected circumstances lead to increases in the expenses. Manage the budget accurately.

6.5 Case studies in the URBAN GreenUP project

This section includes particular case studies for the URBAN GreenUP cities, including some experiences that other cities can benefit from when considering the implementation of nature-based solutions.

6.5.1 Italy: Green Public Procurement Law

The national law on public procurement obliges all Italian Public Bodies to adopt Green Public Procurement in their tendering process for green public areas. These Criteria are called Minimum Environmental Criteria.

There are specific areas of application such as buildings, streets, public lights etc.

In particular, in 2020 Italy approved new tendering process guidelines about:

1. Planning of new green areas, renovation of other one.
2. Management of public green areas.
3. Supply of products for green maintenance.



The law gives some CRITERIA in planning service of new green areas and in renovation areas. The law recommends to the public body:

- To have a Green Plan for the developing of future actions on green public areas.
- To join, to link residual and periphery areas.
- To develop supply of floriculture through cultivation contracts.

For Green Public Procurement for buildings, examples of some criteria include: Soil consumption and permeability must be more than 60% of the area; Canopy area of trees etc must exceed a minimum of 40% cover, draining materials are also specified.

For new green areas, there are some specific criteria for the selection of species that increase the resilience of green areas (for example water management, hydraulic purpose).

6.5.2 Liverpool: Soft market testing

In Liverpool as many of the NBS interventions proposed were 'new' to the city it was decided to undertake a Soft Market Testing exercise, to gauge the level of expertise and interest from contracting organisations. Liverpool City Council launched a Soft market testing for the Green Wall in 2018. Soft Market Testing started on September 2018 and ended October 2018 (one month). This approach also enabled the City Council to know the current market, establish the commercial interest in the various lots ask for general cost estimates for certain types of works and how they could best group some elements of work, for cost efficiencies and more attractive tender proposals, as well as seek market feedback on the most effective way to group the delivery lots.

The municipality received some feedback from interested contractors with some pricing guidelines and comments on how best to group various lots of works for future tender. The limited feedback helped the City Council to guide the final tender groupings and cost estimates, as well as providing reassurance on attracting future tender submissions. After the Soft Market Testing, the City Council prepared the tenders with the information gathered.

Although soft market testing helped with the procurement approach it did not resolve later operational and delivery issues encountered on site, such as the need for strengthening required for a wall at one site, agreements on design, Covid delays and lockdown part way through installation, additional permissions (noise surveys for scaffolding), challenge by unsuccessful contractor, or new regulations coming into place for fire regulations. On a positive note public feedback on the NBS installations was great, and the city Mayor used the URBAN GreenUP green wall footage as the environment section to launch his updated city plan.



6.5.3 Valladolid: Internal approval of the construction project

As the promoter of an intervention, Valladolid City Council proposals must be validated by all the other municipality stakeholders and partners affected to ensure a co-ordinated approach that is then recorded in a report. The other municipality partners are asked to respond within a 2 week deadline and the co-ordinated report is produced within 2 weeks and a month.

This ensures that the proposed construction project is 'owned' by all areas of the Council, which prevents future complications. However, it can result in a delay in the tendering process.

This is the normal procedure to proceed. However, it is not regulated by any local instructions, although Legal Advice usually requests validation reports.



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Annex I. Standard schedule of works contract by open procedure



Standard schedule.

Standard schedule.			Month 1				Month 2				Month 3				Month 4				Month 5				Month 6				Month XX				XX+1			
			Who?	Deadline	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Public procurement: Open procedure			Procurement process												Execution								Closing											
Procurement file			2 months																															
Technical project			E	1 month													WHO? LEGEND: _E: external company _P: procurer _G: government board _Rb: recruitment board _C: contractor																	
Administrative conditions			P	15 days																														
Technical conditions			P	15 days																														
Legal report approval			P	15 days																														
Financial report approval			P	15 days																														
Procurement file			P	15 days																														
Readiness document			P																															
Approval by legal body (Government board / Conunselor)			G																															
Public tendering and Evaluation			2 months																															
Public announcement (publishing)			P	1 day																														
Submission of tenders			P	30 days																														
Recruitment board - 1st meeting- (A) Administrative documents			Rb	15 days													GRAPHIC LEGEND: -----> Expected administrative delay over legal deadlines More than 2 meetings of the recruitment team may be needed																	
Recruitment board - 2nd meeting - (B) Technical evaluation			Rb	15 days																														
Ranking and award proposal (Recruitment board)			Rb	15 days																														
Approval of the award proposal (Government Board / Counselor)			G	15 days																														
Publication of the proposed awarding			P																															
Claims (3 days) & Provision of additional documentation				3 days																														
Awarding																																		
Awarding			P	10-15 days																														
Documentation, guarantees, tenderer notification, non-awarded notification				10 days																														
Public advertisement of the awarded			P	1 day																														
Formalization																																		
Contract signature (before 15 days from awarding)			P-C	15 days																														
Public announcement of the contract			P	1 day																														
Execution of the works contract			xx months																															
Preliminary obligations			15-30 days																															
Health and safety plan (max. 15 days)			C	15 days																														
Programme of work execution (max. 15 days)			C	15 days																														
Construction insurance (max. 15 days)			C	15 days																														
Licenses and permits			C	15 days																														
Supplies for the execution of the work (water, electricity)			C																															
Formal approval of the start of work (max. 10 days from contract)			G-P-C	10 days																														
Works execution																					(period example)													
Readiness document (max. 30 days from signature)			P-C	30 days																														
Start of the works and execution			C																															
Execution of the contract - Completion of the implementation			xx months																															
Certifications																																		
Monthly certification (Works manager)			D	month																														
Six-monthly work report (Works manager)			D	week																														
End of work certification (Works manager)			P-C-D	end																	----->													
Reports																																		
End of work report			P-C-D	end																	----->													



Annex II. Questionnaires from the URBAN GreenUP cities on public procurement and NBS implementation

Questionnaire of the city of Valladolid (Spain)

Questionnaire of the city of Liverpool (United Kingdom)

Questionnaire of the city of Izmir (Turkey)

Questionnaire of the city of Mantova (Italy)

Questionnaire of the city of Ludwigsburg (Germany)

Questionnaire of the city of Binh Dinh (Vietnam)

Tendering process specification in the URBAN GreenUP cities¹

Questionnaire.

The aim of this questionnaire is to collect information about the tendering process specifications in the front-runner and follower cities of the URBAN GreenUP project. This information will be used to complete the report D1.9. Guidelines to tendering process specification.

Next to each question is indicated the section of the D1.9 report where the information provided in this questionnaire will be included, which can be used as a reference to better understand the question and its objective.

The questionnaire consists of 27 questions. Feel free to complete each question with the information you consider, using as many bullets, tables, charts and diagrams as possible, and adding more rows if needed.

Thank you in advance for your collaboration! We really appreciate your time!

City Profile Base Data

Stakeholder data.

Name of the City:

Valladolid

Country:

Spain

Role (for ex. Municipality department):

Innovation Agency

Contact email/other:

avillazan@ava.es

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1. Implementation of the Renaturing Urban Plan (RUP)

The aim of this question is to identify the methods that a local entity may use to develop NBS in its territory.

1.1 Implementing NBS in the city:

(D1.9 Section 2)

What are the different methods that you have to implement NBS in your city?

- ☒ Local authority through public procurement processes
- ☒ Local authority through business as usual activity
- ☐ Private owners/companies
- ☒ Public-private collaboration
- ☐ Other

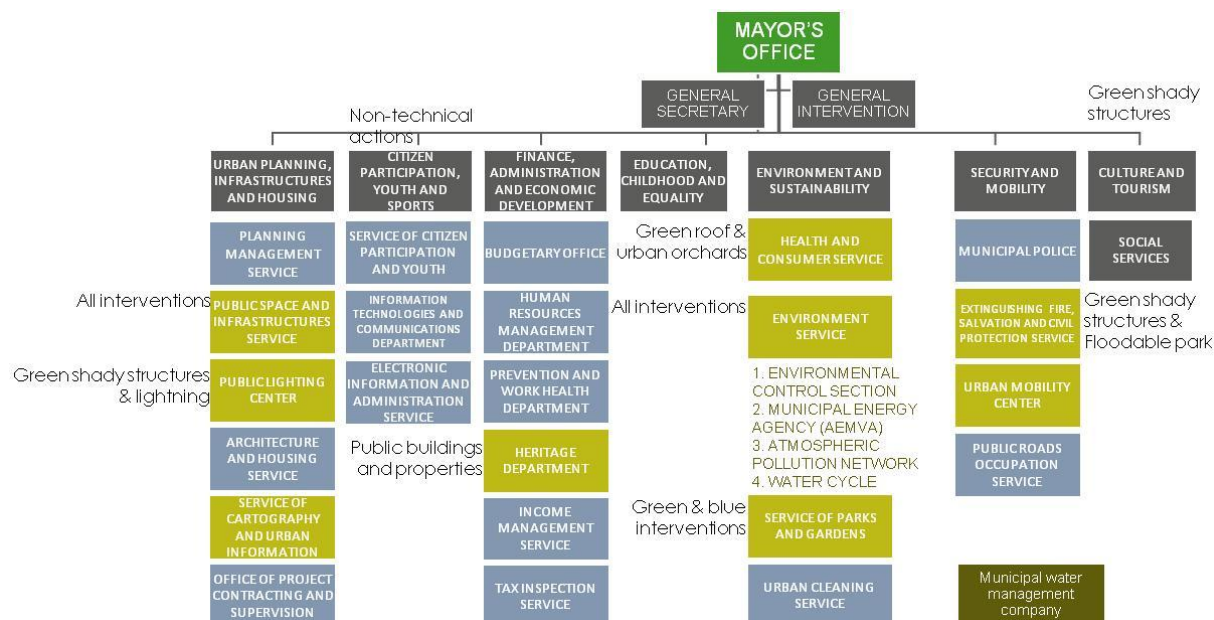
If Other, please, explain. Add some examples for every method.

2. Stakeholders

2.1 Share an organizational chart of your city council, and highlight the areas/department with responsibilities on the implementation of NBS.

(D1.9 Section 2.1)

Insert the organizational chart here (image, chart). Add as many explanations as you want.



Innovation (leads the NBS procurement, implementation and communication activities);
 Urban planning (technical and legal advice);
 Environment (trees selection and planting, maintenance, co-design);
 Finance (economic balance);
 Municipal water body Aquavall (water NBS management, co-design)
 Mobility (cycle lane definition, NBS location).



2.2 Stakeholders in the execution of civil works in relation with the procurement procedure:

What are the stakeholders of the procurement process in the works contract? (D1.9 Section 2.1.2)

- ☒ Government board, responsible for the approval of the tender process and the successful bidder
- ☒ Contract authority, responsible for the administrative management of the contract
- ☒ Recruitment board, responsible for the technical and administrative evaluation
- ☒ Designer, architect/engineer responsible for the technical project signature
- ☒ Contractor, in charge of the contract implementation
- ☒ Works manager, in charge of the general management of the implementation
- ☒ Municipal supervisor, responsible for the administrative supervision and technical advice
- ☐ Other

If other, please complete.

3. Legal framework

(D1.9 Section 3)

Name and describe the main laws regarding the implementation of NBS through public procurement processes, at the supranational (international), national, regional and local levels. Please include a short description and main characteristics. Add as many rows as needed.

We would also like to highlight study cases for the cities (D1.9 Section 3.4). You can include specific study cases, for example, Green procurement law in Italy (MAN).

3.1 Supranational laws.

EU Treaty obligations: free movement of goods, freedom to provide services, freedom of establishment.
EU Procurement Directives: Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC; Directive 2014/23/EU of the European Parliament and of the Council of 26 February 2014 on the award of concession contracts; Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC.

3.2 National laws.

Law 9/2017 on Contracts of the Public Sector (LCSP), which came into force on the 1st of March of 2018
Law 38/1999 of 5th November 1999, on Building Regulation (LOE)

3.3 Regional laws.

Non applicable.

3.4 Local laws.

Include also the local urban planning instrument. (D1.9 Section 3.3. and 3.3.1)

Instruction 1/2018 to promote socially efficient procurement: Strategic, integral and sustainable (Approved by the Local Government Board on 9th May 2018).

Local Urban Plan: Plan General de Ordenación Urbana de Valladolid, 2020.



4. Public procurement procedures

This section identifies the characteristics of the public tendering processes in your country.

4.1 Types of public contracts.

What are the types of public contracts? Add some examples of the implementation of NBS for each type of contract. *(D1.9 Section 4.1)*

☒ Works contract (f.e. construction of a green wall) Examples: Green façade, Green roof, Vertical mobile gardens, Green covering shelter, Green shady structures, Green corridor, Storm-water management systems (SUDS), Sustainable park.

☒ Supply contract (f.e. purchase of trees) Examples: Purchase of Trees and bushes; purchase of Smart soil.

☒ Service contract (f.e. Soil permeability tests) Examples: Project drafting, Soil permeability surveys, Civil works management, Engagement activities

☐ Other.

If other, please complete type of contract and add some examples.

4.2 Types of public procurement procedures.

What are the types of public procurement procedures? *(D1.9 Section 4.2)*

☒ Open procedure

☒ Restricted procedure

☒ Negotiated procedure

☒ Negotiated procedure without prior publication

☒ Competitive dialogue

☒ Innovation partnership

☐ Direct procurement (please answer 4.2.1)

☒ Minor contract (please answer 4.2.2)

☒ Project competition

☐ Other

If other, please complete and provide a short description.

4.2.1. Direct procurement. Describe the main characteristics and thresholds.

4.2.2. Minor contract. Describe the main characteristics and thresholds.



The LCSP (Art. 99) reduces the applicable thresholds for classifying contracts as minor (Spa: Contrato menor). Contracts with an estimated value of less than 40,000 Euros, in the case of works contracts, or 15,000 Euros, in the case of supply or service contracts are considered to minor agreements. In the minor contracts the processing of the dossier will require the report of the Contracting Authority motivating the contract necessity

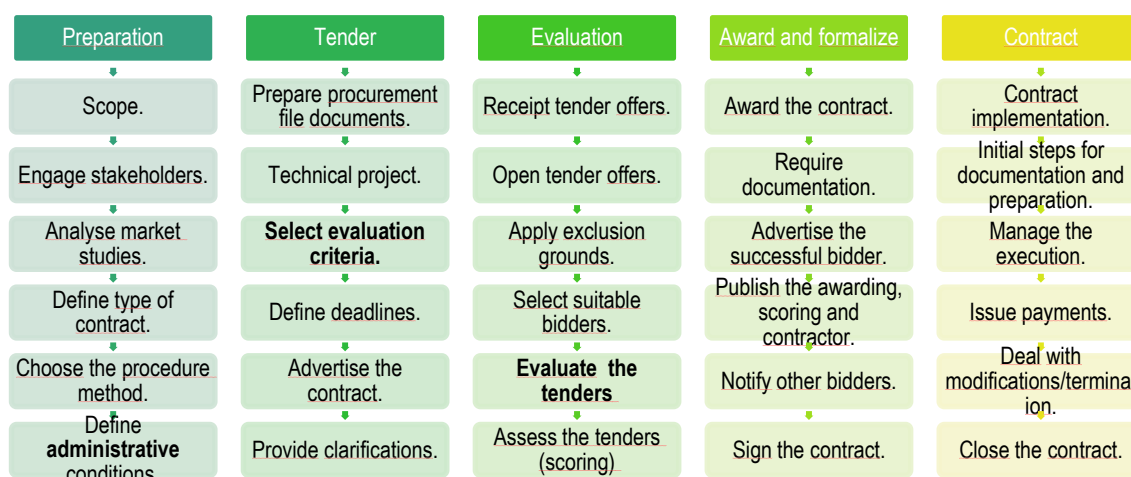
4.2.3. Main procedure for NBS. According to your experience, please write the main public procedure for the implementation of NBS in your city. For example, open procedure and minor contract.

Open procedure, Minor contract, and also purchase of goods through the Framework supply agreement (2017) and services from the Framework services contracts for the Quality control of municipal works, and the service for the Health and Safety activities.

4.3 The public procurement process.

4.3.1. Stages of the public procurement process.

Adapt the following diagram to the stages of the procurement process in your city, by adding/deleting/modifying stages. Add any comment below the diagram, if needed. (D1.9 Section 4.3)



4.3.2. Key stages. Identify what are the key stages and provide the reasons why you answered that. Add as many stages and explanations as you wish. (D1.9 Section 4.3)

According to our experience, I would say that key stages can be the evaluation criteria and administrative documents of the Tender (administrative conditions in the diagram). In some cases, we face issues with the evaluation of the tenders, but in one case that we used non-mathematic criteria but subjective criteria; these are much more difficult to evaluate.

4.4 Phase 1. Preparation of the tendering process.

4.4.1. Public procurement documents. The following documents for the public procurement administrative file are identified: Technical project, Administrative conditions, Technical conditions, Financial report and Legal report. What are the documents that you must prepare as part of the administrative file for the public procurement? Add the name of documents and explain the content and purpose. (D1.9 Section 4.3. Tender documents file)

The procurement file for an open procedure in Spain and in Valladolid comprises many documents, which are the following:

1. Justifying report: Document that justifies the need for the contract.



2. Financial Sustainability Report. Economic and financial document justifying the need for and availability of public funds. This includes the budget allocation.
3. Technical Project, signed by a competent technician (with insurance), that it includes: Index, Memory, Map, Particular Technical Specifications (PPTP), Budget and Measurements, Basic Health and Safety Study, Waste Management.
4. Positive report from the Municipal Supervisor about the project.
5. Administrative conditions (PCAP)
6. Tender conditions (CCP)
7. Draft proposal for a Local Authority resolution (approval)

4.4.2. Criteria for division in lots. Share your criteria for the division (or not) of a procurement contract in lots. Difference the legal criteria from the criteria you get from experience. (D1.9 Section 4.3.Division in lots)

The division of the object of the contracts into lots with functional, geographical and/or economic criteria will be the general rule in the public sector procurement of the City of Valladolid, unless, for duly justified technical or operational reasons, it is materially impossible to divide up or to coordinate the different contractors for the proper performance of the contract, in such a way as to efficient, even with specific external assistance for such coordination. The purpose is to adapt the size of contracts to facilitate the participation of SMEs in them. (Article 35)

Source: Local Instruction about procurement in Valladolid Instruction 1/2018, To Promote Recruitment Socially Efficient: Strategic, Integral And Sustainable, In The City Council Of Valladolid And Its Public Sector Entities.

<https://www.valladolid.es/es/ayuntamiento/normativa/instruccion-1-2018-impulsar-contratacion-socialmente-eficie.ficheros/475710-INSTRUCCIONContrataci%C3%B3n%20eficiente%20y%20estrat%C3%A9gica.docx.pdf>

4.4.3. Criteria for the evaluation of the tendering offers.

Share your criteria for the evaluation of the procurement offers in terms of criteria that can be evaluated mathematically by means of a formula (objective), and criteria that can not be evaluated through a formula (subjective). Add the suggested % for scoring (from 0-100%). Complete and edit the following table. (D1.9 Section 4.3.Criteria for NBS evaluation)

Price / Cost	Contracting authorities shall base the award of public contracts on the most economically advantageous tender, understood as lowest price per unit or total costs for implementation. <i>Examples: €/tree. €/m² vertical garden.</i>	From 100% to 60%
Increase in scope	Increase in the number of units with no additional cost. <i>Examples: plant a higher number of trees, increase km of cycle lane, increase green surface, add more pollinator's modules, increase m² of SUDs.</i>	20%
Reduce the execution time	The shortening of the project's execution time increases the effectiveness of the implementation. Establish the measure in calendar days or in working days. <i>Examples: Reduction of execution by 10 working days.</i>	20%
Life cycle analysis	Environmental criteria to the solution with the less life cycle analysis cost. <i>Examples: Distance between the supplier and the final destination.</i>	Less than 10%
Scoring (0% - 100%)		100%

Local Instruction 1/2018, encourages including social, environmental and circular economy criteria in the procurement. These criteria must be easy to understand by SMEs (Art. 12). The aim is to select the



offer that is most advantageous in terms of quality/price overall. As a general rule, valuation criteria that can be evaluated by means of value judgements will only be used in special conditions (Art. 14).

Always Contracts shall be awarded using a variety of award criteria based on the best value for money. The best value for money will be assessed on the basis of economic and qualitative criteria. (LCSP).

4.5 Phase 2. Tender publication.

4.5.1. Contract notice.

Write the name and web address of the contracting platform where the bidding processes are published in your city and/or country. (D1.9 Section 4.3.Phase 2 Contract notice)

Plataforma de Contratos del Sector Público (PCSSP): www.contrataciondelestado.es

Perfil del Contratante del Ayuntamiento de Valladolid: <https://www.valladolid.gob.es/es/perfil-contratante>

4.6 Phase 3. Evaluation.

Note if the evaluation of proposals in a tendering procedure is through the opening of two envelopes, the administrative and the technical-economic offer. Describe shortly the process in your city/country. (D1.9 Section 4.3.Phase 3 Evaluation)

The evaluation is carried out by a Contracting Committee, which assists the contracting body in this process. The Contracting Committee evaluates the information received by the bidders, ranks them in order of highest to lowest scores and makes a proposal to the contracting body for acceptance or rejection. The contracting body accepts or not the proposal.

The Contracting Committee meets and evaluates the administrative information. In a first process, it may already reject a tenderer or request further information (envelope A). It also analyses abnormally low proposals. In a second stage, the Contracting Committee meets and evaluates the economic proposal (envelope B), as well as bringing together the technical committee of experts for evaluation by means of a value judgement.

This assessment will be made public at the time of the opening of the envelope containing the elements of the bid that will be assessed by the mere application of formulas (envelope B)

4.7 Timescale for the Open procedure.

The aim of this diagram is to establish an average duration of the typical tendering process by open procedure, to complete the detailed table in Annex I. Schedule of civil Works procurement by Open procedure (see Annex I for further clarifications).

Create a diagram of the basic phases of the public procurement process of your country/city, as well as include the duration of each period, in legal terms (according to the applicable Public Sector Contracts Law) and in real terms (experience). Include the diagram here or as an attached document. (D1.9 Section 4.4)

It is difficult to establish a time frame that can be applied to all tendering processes. On average, it took us 4.5 months to tender for NBS, just for the tender, without counting the previous time for preparing all the documents in the Tender file.



5. Financing nature-based solutions

This section identifies the financial aspects for the implementation of NBS.

5.1 Financial plan: Budget breakdown for the construction of NBS.

Complete the additional expenses to the budget of the technical project that a local administration must take into account when making its financial plan. Among the additional concepts to be considered are: general expenses, industrial profit, taxes, quality control, health and safety coordination, construction management, designer, others. Please, specify the % cost increase of each concept (See section 5.1.1. from the *D1.9 Guidelines to tendering process specifications* report for more information about this question) *(D1.9 Section 5.1)*

The following costs breakdown have real data for Valladolid City Council, as an illustrative example (D2.5)

1. SUMMARY OF BUDGET TENDER BASE (PBL)		
Material execution budget (PEM)		100.000,00 €
General expenses (13%) (GE)	13%	13.000,00 €
Industrial benefit (6%) (IB)	6%	6.000,00 €
BUDGET TENDER BASE without VAT (PC)		119.000,00 €
VAT (21%)	21%	24.990,00 €
BUDGET TENDER BASE WITH VAT (PC with VAT)		143.990,00 €
2. TOTAL BUDGET (PT)		
Material execution budget (PEM)		100.000,00 €
Contract budget (PC)		119.000,00 €
Project (P) (3,5%) and Works Direction (DO) (1,8%) – Architect	5,3%	5.300,00 €
VAT (21%)	21%	1.113,00 €
Execution Works Direction (DEO) – Technical architect	1,8%	1.800,00 €
VAT (21%)	21%	378,00 €
Quality control (2,5% PEM)	2,5%	2.500,00 €
VAT (21%)	21%	525,00 €
Health and Safety coordination (0,465% PEM)	0,465%	465,00 €
VAT (21%)	21%	97,65 €
TOTAL BUDGET		156.168,65 €

5.2 Funding opportunities.

Complete specific funding opportunities to implement NBS in your city/country. Classify these funds into international funds, national funds, regional or local specific funds. *(D1.9 Section 5.2)*

Horizon 2020 (EU), LIFE+ Climate actions (EU), Interreg programme (EU)

6. Practical information

This section provides practical information to public bidders from other cities to improve their bidding processes in the implementation of NBS. Share your experience with tips, recommendations, barriers, lessons learnt and questions and answers. Your experience is very welcome.

6.1 Tips and recommendations.

Add some tips and recommendations for the public procurers of other cities in the NBS tendering processes. *(D1.9 Section 6.1)*



- NBS implementation is a transversal discipline, so the municipality should create a transversal and multidisciplinary team in the city council, whose members should adapt to speak a common language.
- Go to the legal department of the city council for professionals to identify all applicable regulations. Arrange a multidisciplinary team within the City Council, which mixes technical (design and implementation), legal (regulations) and administrative (procedures) capacities, using an integrated narrative.
- The implementation of some interventions requires permits from other bodies. It is recommended to consider the need for permits well in advance. For example: Permission for water management from the basin organisation.
- Plan budget requirements in advance so that they are compatible with the annual items. Consider the whole life process costs from construction to maintenance costs.
- It simplifies the execution by minimising the number of public tendering processes, which are complex, as well as facilitating the coordination of the works and the integral execution.
- Design simple tendering processes of limited scope to facilitate access to opportunities for small and medium-sized enterprises at or near the local level.

6.2 Questions and answers.

Add some key questions and answers for the public procurers of other cities in the NBS tendering processes. *(D1.9 Section 6.2)*

How to classify a contract into works, supply or services if it is mixed? When the implementation of the NBS is a combination of several types of procurement (works, services or supplies) in one procurement procedure, the rules applying in that case are those applicable to the type of procurement corresponding to the main subject matter of the contract. The main subject is measured in terms of % over the budget.

6.3 Challenges and barriers.

Describe the challenges and barriers that you face when implementing NBS in your city, and how to overcome them. *(D1.9 Section 6.3)*

- Possible lack of ordinances and local regulations related with NBS.
- Slow periods for public tendering and processing.
- Possible delays due to some missing administrative tender document or processing issues.
- Responsibility for maintenance.
- Difficulties finding skilled suppliers in the local area.
- Limited access to funding.
- Errors in NBS maintenance planning.

6.4 Lessons learnt.

Describe the lessons learnt that you would like to share with other cities to make the implementation of NBS easier. *(D1.9 Section 6.4)*

Public tendering processes can be slow and complex. Plan the implementation of NBS according to a schedule adapted to the duration of the processes according to your local legislation.

Plan carefully the annual financial plan for the RUP, to ensure budget execution within the same fiscal year.



6.5 Study cases.

You can add study cases that you experienced on the implementation of NBS through public procurement processes. These will serve as experiences for other cities. This section can include specific issues about the legal framework, types of procurement processes, burdens, etc.

Describe any aspects of your city or country that you want to include as a "case study" within the *D1.9 Guideline for tendering processes*, as a particular example, which may be useful for other cities and which have not been collected in any question in this questionnaire. For example, the Soft market testing delivered in Liverpool, etc. *(D1.9 Section 6.5)*

When Valladolid City Council is the promoter of an intervention, the construction project which is provided by a certain Area, must be validated by all the areas with interference in their activities. In this way, the area responsible for the contract shares the construction project with the other areas of the City Council, and requests a report. To deliver this report is requested by internal mail and a deadline for response is given. This usually varies between 2 weeks and a month. This operation ensures the validation of the construction projects by all areas of the Town Hall, which prevents future complications. However, it can result in a delay in the tendering process. This is the normal procedure to proceed. However, it is not regulated by any local instructions, although Legal Advice usually requests validation reports.



Tendering process specification in the URBAN GreenUP cities¹

Questionnaire.

The aim of this questionnaire is to collect information about the tendering process specifications in the front-runner and follower cities of the URBAN GreenUP project. This information will be used to complete the report D1.9. Guidelines to tendering process specification.

Next to each question is indicated the section of the D1.9 report where the information provided in this questionnaire will be included, which can be used as a reference to better understand the question and its objective.

The questionnaire consists of 27 questions. Feel free to complete each question with the information you consider, using as many bullets, tables, charts and diagrams as possible, and adding more rows if needed.

Thank you in advance for your collaboration! We really appreciate your time!

City Profile Base Data

Stakeholder data.

Name of the City:

Liverpool

Country:

United Kingdom

Role (for ex. Municipality department):

Local Authority

Contact email/other:

Juliet.staples@liverpool.gov.uk

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1. Implementation of the Renaturing Urban Plan (RUP)

The aim of this question is to identify the methods that a local entity may use to develop NBS in its territory.

1.1 Implementing NBS in the city:

(D1.9 Section 2)

What are the different methods that you have to implement NBS in your city?

☒ Local authority through public procurement processes

☒ Local authority through business as usual activity

☐ Private owners/companies

☐ Public-private collaboration

☐ Other

If Other, please, explain. Add some examples for every method.

Local Authority competitive public procurement processes include procurement of: green walls, floating ecosystem, pollinator planting, SuDs schemes, arts scheme, surveys. For some projects procurement exemptions were requested to appoint delivery agents. This was only where the product was unique to one supplier or suppliers (smart pillars, planting containers for trees, use and promotion of iNaturalist). Business as Usual activities for procurement included: civils works and tree planting. Partners like Mersey Forest may use others.

2. Stakeholders

2.1 Share an organizational chart of your city council, and highlight the areas/department with responsibilities on the implementation of NBS.

(D1.9 Section 2.1)

Insert the organizational chart here (image, chart). Add as many explanations as you want.



full-lcc-structure-chart-updated-131020

COMMUNITY SERVICES

- Streetscene Services are the department that would usually drive the implementation of NBS
- Neighbourhood services help with communications

REGENERATION AND ECONOMY

- Highways services are now familiar with the concept of NBS after joint working on the URBAN GreenUP scheme and would provide advice/info on licences for works and any associated road closures.
- Planning services provide advice on the need for planning permissions etc
- Regeneration Services are keen to promote NBS as part of future works (and the developing RUP).

COMMUNICATIONS

- Communications help to promote the NBS that is being installed and raise awareness

FINANCE AND RESOURCES

- Finance and procurement services are based within each of the different services. These teams provide support in delivering and managing aspects of the NBS implementation.

OTHER



- Liverpool Streetscene Services (not shown on the chart) are an arm's length company of the city council and provide maintenance of the green space. They advise on the implementation of NBS and its future maintenance requirements and costs.

2.2 Stakeholders in the execution of civil works in relation with the procurement procedure:

What are the stakeholders of the procurement process in the works contract? (D1.9 Section 2.1.2)

- ☐ Government board, responsible for the approval of the tender process and the successful bidder
- ✓ ☐ Contract authority, responsible for the administrative management of the contract
- ☐ Recruitment board, responsible for the technical and administrative evaluation
- ✓ ☐ Designer, architect/engineer responsible for the technical project signature
- ✓ ☐ Contractor, in charge of the contract implementation
- ☐ Works manager, in charge of the general management of the implementation
- ✓ ☐ Municipal supervisor, responsible for the administrative supervision and technical advice
- ☐ Other

If other, please complete.

The local authority is primarily responsible for the procurement procedures but in the course of this project was assisted by designers/architects and expert contractors.

3. Legal framework

(D1.9 Section 3)

Name and describe the main laws regarding the implementation of NBS through public procurement processes, at the supranational (international), national, regional and local levels. Please include a short description and main characteristics. Add as many rows as needed.

We would also like to highlight study cases for the cities (D1.9 Section 3.4). You can include specific study cases, for example, Green procurement law in Italy (MAN).

3.1 Supranational laws.

Public procurement is subject to the EU Treaty principles of:

- non-discrimination
- free movement of goods
- freedom to provide services
- freedom of establishment

In addition to these fundamental treaty principles, some general principles of law have emerged from the case law of the European Court of Justice. The most important of these general principles of law to be aware of in the procurement context are:

- equality of treatment
- transparency
- mutual recognition
- proportionality

EU Procurement Directives

Since the 1970s, the EU has adopted legislation to ensure that the EU public procurement market is open and competitive and that suppliers are treated equally and fairly. The rules cover aspects such as



advertising of contracts, procedures for assessing company credentials, awarding the contracts and remedies (penalties) when these rules are breached.

The EU rules are contained in a series of directives that are updated from time to time. Member states have to make national legislation (regulations) to implement the EU rules in domestic law by certain deadlines. The most recent update of the EU procurement directives was in April 2014. This followed a successful lobbying campaign by the UK government and our EU partners to negotiate a simpler, more flexible regime of procurement rules. Member states then had 2 years to implement these in national law i.e. by April 2016.

These directives are:

- Public Sector: Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC
- Concessions: Directive 2014/23/EU of the European Parliament and of the Council of 26 February 2014 on the award of concession contracts
- Utilities: Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC

Public procurement is also subject to the World Trade Organisation Government Procurement Agreement.

3.2 National laws.

In the UK, Local Government led procurement is governed by a range of legislation and good practice which Local Authorities need to comply with.

Crown Commercial Services

The Crown Commercial Service (CCS) is responsible for the legal framework for public sector procurement and leads on the development and implementation of procurement policies for government.

Crown Commercial Services issues Procurement Policy Notes PPN's which provide advice on best practice for public sector buying organisations in line with the relevant Procurement Regulations.

UK Public Contracts Regulations (PCR) 2015

The implementation of the Public Contracts Regulations 2015 took effect from 26 February 2015 and helped to deregulate and simplify the rules for where most procurement spend and activity takes place. This enables buyers to run procurements faster, with less red tape, and with a greater focus on getting the right supplier and best tender in accordance with sound commercial practice.

The UK regulations include some specific UK rules to support growth by improving suppliers' access to public contracts below the EU thresholds ("sub-threshold contracts"). These rules include requirements for publishing advertised public contract opportunities and contract awards below the EU thresholds, but over certain other threshold values, on Contracts Finder (see section 3.6).

The PCR 2015 set out 6 procedures that contracting authorities must adhere to when procuring goods works or services above the OJEU thresholds.

- Open procedure.
- Restricted procedure.
- Competitive procedure with negotiation.
- Competitive dialogue.
- Innovation partnership.
- Use of the negotiated procedure without prior publication.

Thresholds for contracts regulated by the Public Contracts Regulations 2015 from 1 Jan 2018

- Supply and services contracts (central government) £118,133
- Supply and services contracts (non-central government) £181,302
- Works and subsidised works contracts £4,551,413
- Social and other services contracts falling within the "Light Touch Regime" £615,278



The Public Procurement (Amendments, Repeals and Revocations) Regulations 2016

The Public Procurement (Amendments, Repeals and Revocations) Regulations 2016 make consequential amendments to other legislation, including the Public Services (Social Value) Act 2012. This should be read together with The Public Contracts Regulations 2015, The Utilities Contracts Regulations 2016 and The Concession Contracts Regulations 2016, which can be found on the EU procurement directives and the UK regulations guidance page <https://www.gov.uk/guidance/transposing-eu-procurement-directives>.

Tenders not covered by the Public Contracts Regulations 2015

When a tender process is not subject to the Public Contracts Regulations because the estimated value of a contract falls below the relevant threshold, contracting authorities must continue to apply the principles of non-discrimination, equal treatment, transparency, mutual recognition and proportionality. Contracting authorities must also consider where a contract is likely to attract cross-border interest and must publish a sufficiently accessible advertisement to ensure that suppliers in other member states can have access to appropriate information before awarding the contract. This is in line with the UK objective of achieving value for money in all public procurements, not just those covered by the Public Contracts Regulations.

The Councils CSO's also set out the requirements for procurement for goods, works and services both below and above the OJEU thresholds.

3.3 Regional laws.

Contracting Authorities must adhere to the following domestic legal requirements:

The Late Payment of Commercial Debts Regulations 2013: amended late payment legislation came into force on 16 March 2013, implementing European Directive 2011/7/EU on combating late payment in commercial transactions. It aims to make pursuing payment a simpler process across the EU, reducing the culture of paying late and making payment on time the norm.

Equality Act 2010: in accordance with the Equality Act 2010 you are required to comply with the Public Sector Equality Duty when conducting public procurement. This sets out anti-discrimination law and identifies nine 'protected characteristics' age, disability, gender reassignment, race, religion or belief, sex, sexual orientation, pregnancy or maternity, and marriage and civil partnership.

The Public Sector Equality Duty 2011 requires public bodies to have due regard to the need to eliminate unlawful discrimination, harassment and victimisation, advance equality of opportunity, and foster good relations. This Duty is non-delegable.

Public Services (Social Value) Act 2012: requires public bodies to consider how the services they commission and procure might improve the economic, social and environmental wellbeing of an area. This extends beyond cost or price and looks at wider community benefits to improve peoples' lives, opportunities and the environment. The Act applies to all public service contracts but not to specific works or goods contracts.

European Union (EU) Public Service Contracts Directives aim to ensure contracts are awarded fairly and without discrimination on the grounds of nationality, all potential bidders are treated equally, and suppliers of goods and services can take action against public bodies if contracts are not advertised or awarded on an open and fair basis.

The Local Government (Transparency Requirements) (England) Regulations 2015: This legislation requires the information, including information about public contracts, in Part 2 of the Local Government Transparency Code 2015 to be published in the manner and form and on the occasions specified. Responsibility for this legislation and Code lies with the Department for Communities and Local Government.

The following relevant domestic legal requirements must also be adhered to.

Small Business Enterprise and Employment (SBEE) Act 2015: Section 39 of the act gives the Minister for the Cabinet Office (MCO) the ability to implement secondary legislation imposing duties on public procurers in relation to procurement matters. Under Section 40 in-scope.

Contracts Finder



Contracts Finder is the UK public sector procurements single point to advertise all opportunities. The Public Contract Regulations 2015 set out that contracting authorities must place advertisements and awards for all opportunities above:

- £10,000 for central government bodies and
- £25,000 for wider public sector bodies

Crown Commercial Services have produced a Procurement Policy Note (PPN) which further clarified that *‘where a contracting authority is satisfied it is lawful not to advertise an opportunity and chooses not to advertise the opportunity at all, the requirement to advertise on Contracts Finder does not apply to that contract. This may be the case where, for example, a contracting authority has a standing order stating that advertising is not required for contracts with a value below a certain amount, and there is no legal requirement to advertise the contract.’*

Section 10 of Liverpool City Council’s CSO’s set the amount required to advertise opportunities on Contracts Finder at £100,000.

3.4 Local laws.

Include also the local urban planning instrument. F.e. *Plan General de Ordenación Urbana 2020. Valladolid.* (D1.9 Section 3.3. and 3.3.1)

City Procurement Process

LCC is governed by local authority finance and procurement guidelines. Local Authority officers are required to adhere to financial regulations and standing orders and there are strict procedures for procurement. In addition an emphasis is placed on addressing both equality impact assessment and social value. The majority of procurement for the URBAN GreenUP project is likely to follow the City Council processes and be led by the city. Where procurement is led by the Mersey Forest Team, through Community Forest Trust similar processes exist and will be followed.

Liverpool City Council Contract Standing Orders (CSO’s)

Liverpool City Council has a set of Contract Standing Orders which are issued in accordance with section 135 of the 1972 Local Government Act. The intention is to promote good purchasing practice and public accountability and deter corruption.

The CSO’s set out the following basic principles;

All purchasing and disposal procedures must:

- Achieve Value for Money for public money spent.
- Be consistent with the highest standards of integrity.
- Ensure fairness in allocating public contracts.
- Comply with all legal requirements.
- Support the Council’s strategic and departmental aims and policies.
- Comply with the Council’s Procurement Strategy, and other relevant policies.
- Be subject to the category management methodology where appropriate.
- Comply with the Public Contracts Regulations 2015 (“PCR”), the Concession Contracts Regulations 2016 (“CCR”) and associated EU legislation where applicable.

All officers engaged in purchasing and disposal must:

- Ensure that any irrelevant considerations do not influence any contracting decision.
- Ensure that no commercial agreement with a supplier, contractor or provider over £100,000 is entered into without sign-off from the Director of Finance and Resources.
- Obtain the relevant financial, legal and in some instances technical approval before entering into a contractual commitment with a supplier, contractor or provider.
- Ensure procurement activity is conducted via an approved source to pay process utilising a source to pay system approved by the Director of Finance and Resources.
- Ensure financial approval, separation of duties, standing orders and Financial Regulations are applied to all procurement activity.



- Ensure assurances are sought that potential suppliers do not engage in union blacklisting and provision.

The CSO's also set out the procurement thresholds and split these into 5 main bandings as below

Total Value	Procurement Method	Competition Requirements
Up to £5,000	At least two written quotations are to be sought and a record kept to justify why this option has been chosen (e.g. lowest cost, best value for money).	At least two written quotations
£5,000 - £24,999	To be procured through the CPU's Category Management Team, except with the consent of the Director of Finance and Resources.	A quotation or tender exercise to be undertaken by the CPU
£25,000 - £100,000	To be procured through the CPU's Category Management Team, except with the consent of the Director of Finance and Resources.	A tender exercise to be facilitated by the CPU. If advertised, must include advertising on the Council's eProcurement system and on Contracts Finder.
Over £100,000 and below EU threshold	To be procured through the CPU's Category Management Team, except with the consent of the Director of Finance and Resources.	All opportunities must be advertised on the Council's eProcurement system and on Contracts Finder.
Above EU threshold for Goods, Services and Works	To be procured through the relevant CPU Category Management Team following	OJEU and Contracts Finder

4. Public procurement procedures

This section identifies the characteristics of the public tendering processes in your country.

4.1 Types of public contracts.

What are the types of public contracts? Add some examples of the implementation of NBS for each type of contract. *(D1.9 Section 4.1)*

☐ Works contract (f.e. construction of a green wall) Examples: Green walls, ecosystem islands, Suds schemes, pollinator planting

☐ Supply contract (f.e. purchase of trees) Examples: purchase of trees

☐ Service contract (f.e. Soil permeability tests) Examples: ecological surveys, utility surveys, soil surveys

☐ Other.

If other, please complete type of contract and add some examples.

4.2 Types of public procurement procedures.

What are the types of public procurement procedures? *(D1.9 Section 4.2)*

☒ Open procedure

☒ Restricted procedure

☐ Negotiated procedure

☐ Negotiated procedure without prior publication



- ☐ Competitive dialogue
- ☐ Innovation partnership
- ☒ Direct procurement (please answer 4.2.1)
- ☐ Minor contract (please answer 4.2.2)
- ☐ Project competition
- ☐ Other

If other, please complete and provide a short description.

4.2.1. Direct procurement. Describe the main characteristics and thresholds.

Direct procurement occurred where there was no other supplier and the service or product was unique. This happened (or will happen) for the pollinator smart pillars, where there is just one supplier for the product. (Value of award will be c £33k). It will also happen with a tree container company who are able to design a re-useable container from recycled materials. The company were located by appointed consultants as relatively local, sustainable and cost effective. The tree containers will be innovative and a unique product and customised to our requirements. (Value of award will be less than £20K). We also procured directly for the bio-app element of the project. An exemption was requested to enable us to work with specialised local partners with expert knowledge and access to local records.

Direct procurement is also used under the *business as usual* approach. For example the city council Highways department may be undertaking road works with a competitively appointed contractor and we may ask them to include some minor works for us and this will be added onto the contract for efficient and cost effective delivery and we will then journal payment across to the Highways finance team when the works are complete. This approach has been used for a number of smaller packages of work including tree procurement for urban green up (adding trees onto the council's other orders and transferring the money internally). It allows for quick and easy procurement under existing arrangements without the need to get quotes or advertise and there is usually cost efficiencies in combining procurement works like this as well.

4.2.2. Minor contract. Describe the main characteristics and thresholds.

Up to £5,000	At least two written quotations are to be sought and a record kept to justify why this option has been chosen (e.g. lowest cost, best value for money).	At least two written quotations
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In Liverpool we can deliver low value works with 2 or 3 email or written quotations.

4.2.3. Main procedure for NBS. According to your experience, please write the main public procedure for the implementation of NBS in your city. For example, open procedure and minor contract.

Open contract

Procurement Process: The Council utilises a number of routes to market. In order to ascertain the most appropriate route the Council's procurement team work together with the relevant stakeholder to produce a governance document which will determine, amongst other things, the appropriate route to market including commercial options by way of a robust options appraisal. Some of the more common routes to market include;

1. Use of existing framework agreements
2. Open tender process (either above or below the OJEU thresholds)
3. Restricted tender process (only for above OJEU thresholds unless for works contracts)



In exceptional circumstances, a waiver of certain CSOs may be required in order to properly achieve the Council's aims. An exemption may only be sought in the following circumstances:

- Where the goods, works or services are required urgently, where this urgency has been brought about by events that were unforeseeable by and not attributable to the Council;
- Where the goods, works or services are of a specialist nature such that competitive prices cannot be obtained;
- To develop a pilot service, where it can be demonstrated that there is no market, or where the market is not sufficiently developed;
- To engage an artistic performer, to appear at an event or function of a sporting, cultural, civic or business nature of which the Council is the owner; and
- Arrangements involving sponsorship.

4.3 The public procurement process.

4.3.1. Stages of the public procurement process.

Adapt the following diagram to the stages of the procurement process in your city, by adding/deleting/modifying stages. Add any comment below the diagram, if needed. (D1.9 Section 4.3)



4.3.2. Key stages. Identify what are the key stages and provide the reasons why you answered that. Add as many stages and explanations as you wish. (D1.9 Section 4.3)

Liverpool key stages are very similar. I would need to check with procurement if we publish the awarding score and contractor.

4.4 Phase 1. Preparation of the tendering process.

4.4.1. Public procurement documents. The following documents for the public procurement administrative file are identified: Technical project, Administrative conditions, Technical conditions, Financial report and Legal report. What are the documents that you must prepare as part of the administrative file for the public procurement? Add the name of documents and explain the content and purpose. (D1.9 Section 4.3. Tender documents file)

There are two main documents – the *Quotation Document* and the *Service Specification*. These are accompanied by other supporting information including – utility surveys, pre construction information, risk assessment, maps and plans.

Quotation document contains sections on:

- 1 Instructions For Completion



- 2 Introduction
 - 3 Specification
 - 4 Fair City And Social Value
 - 5 Evaluation Questions
 - 6 Indicative Timescales
 - 7 Contract Term
 - 8 Supplier Response
 - 9 Professional Misconduct Statement
 - 10 Undertakings
- The *Service Specification* contains sections on

Form of Tender
Preliminaries
Specification –Project Details and Specification
Costing Schedule
Main Collection Summary
Summary of Contract Particulars

4.4.2. Criteria for division in lots. Share your criteria for the division (or not) of a procurement contract in lots. Difference the legal criteria from the criteria you get from experience. (*D1.9 Section 4.3.Divission in lots*)

Experience and technical skills helped to define procurement contracts in lots. Where very different skills or specialised skills were needed for part of identified works the contracts were sometimes divided into separate lots. Contractors could bid for one or all lots but this helped to guarantee attracting competition and the skills required. There was no legal criteria used. Increasing the lots can increase administration and risks, losing some of the cost efficiencies in larger schemes, but you can sometimes get local suppliers and specialist contractors.

4.4.3. Criteria for the evaluation of the tendering offers.

Share your criteria for the evaluation of the procurement offers in terms of criteria that can be evaluated mathematically by means of a formula (objective), and criteria that can not be evaluated through a formula (subjective). Add the suggested % for scoring (from 0-100%). Complete and edit the following table. (*D1.9 Section 4.3.Criteria for NBS evaluation*)

Price / Cost	Contracting authorities shall base the award of public contracts on the most economically advantageous tender, understood as lowest price per unit or total costs for implementation. <i>Examples: €/tree. €/planter. €/m² vertical garden. [Add other examples] costs for numbers of deliverables or for various categories such as cost of planters £, cost of second year sowing for pollinators £ etc</i>	Ranged from 50% to 70% in this project
Increase in scope	Increase in the number of units with no additional cost. <i>Examples: plant a higher number of trees, increase km of cycle lane, increase green surface, add more pollinator's modules, increase m² of SUDs.</i>	N/A
Reduce the execution time	The shortening of the project's execution time increases the effectiveness of the implementation. Establish the measure in calendar days or in working days. <i>Examples: Reduction of execution by 10 working days.</i>	N/A
Life cycle analysis	Environmental criteria to the solution with the less life cycle analysis cost. <i>Examples: Distance between the supplier and the final destination.</i>	N/A



Quality/experience	Contracting authorities shall base the award of public contracts on the quality of tenders submitted. This is assessed through the scoring of a set of standardised questions on issues such as experience, design, materials, sustainability (life cycle costs), maintenance etc.	Ranged from 50% to 70%
	Scoring (0% - 100%)	100%

4.5 Phase 2. Tender publication.

4.5.1. Contract notice.

Write the name and web address of the contracting platform where the bidding processes are published in your city and/or country. (D1.9 Section 4.3.Phase 2 Contract notice)

Due North Portal, Pro Contract <https://procontract.due-north.com/Login>

4.6 Phase 3. Evaluation.

Note if the evaluation of proposals in a tendering procedure is through the opening of two envelopes, the administrative and the technical-economic offer. Describe shortly the process in your city/country. (D1.9 Section 4.3.Phase 3 Evaluation)

Assessing Suppliers

In line with all procurement legislation, rules and policy suppliers wishing to tender for opportunities will be assessed on past performance via a **Selection Questionnaire (SQ)**. Those invited to tender will then be invited to tender via an **Invitation to Tender (ITT)** to submit a tender based on MEAT (Most Economically Advantageous Tender) criteria. Suitable questions and weightings will be agreed with the project leader in liaison with the Councils Commercial Procurement Unit.

Selection Questionnaire (SQ)

In line with the CCS PPN 8/16. The Council utilises two main types of selection questionnaires depending on value and what is being procured. For goods and services the Council uses the CCS Standard Selection Questionnaire.

For works or services related the works, in line with CCS PPN

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/558531/PPN_8_16_StandardSQ_Template_v3.pdf

The Standard Selection Questionnaire is split into 3 parts;

- Part 1 of the standard Selection Questionnaire covers the basic information about the supplier, such as the contact details, trade memberships, details of parent companies, group bidding and so on.
- Part 2 covers a self-declaration regarding whether or not any of the exclusion grounds apply.
- Part 3 covers a self-declaration regarding whether or not the company meets the selection criteria in respect of their financial standing and technical capacity

PAS91 is split into Core and Mandatory Options. It still includes basic information, self declarations, financial standing but goes into considerable more detail around health and safety.

Invitation to Tender (ITT)

The invitation to Tender document sets out the process for evaluating tenders. The Councils Standing Orders set out minimum information which is to be contained in the ITT.

- A specification that describes the Council's requirements in sufficient detail to enable the submission of competitive offers.
- A requirement for bidders to declare that the tender content, price or any other figure or particulars concerning the tender have not been disclosed by the bidder to any other party (except where such a disclosure is made in confidence for a necessary purpose).



- A requirement for bidders to fully complete all tender documents including a form of tender and certificates relating to canvassing and non-collusion.
- Notification that tenders are submitted to the Council on the basis that they are compiled at the bidder's expense.
- A description of the Award Procedure and, unless defined in a prior advertisement, a definition of the Award Criteria in objective terms and if possible in descending order of importance.
- That the Council uses an e-Procurement system for undertaking all tendering exercises and only submissions received through the e-Procurement system will be considered and evaluated. Paper copies, CDs and other electronic formats will not be accepted.

The Council has a suite of standard ITT template documents to use to suit different types and values of procurement.

4.7 Timescale for the Open procedure.

The aim of this diagram is to establish an average duration of the typical tendering process by open procedure, to complete the detailed table in Annex I. Schedule of civil Works procurement by Open procedure (see Annex I for further clarifications).

Create a diagram of the basic phases of the public procurement process of your country/city, as well as include the duration of each period, in legal terms (according to the applicable Public Sector Contracts Law) and in real terms (experience). Include the diagram here or as an attached document. (D1.9 Section 4.4)

Timescales and Process

Procurements above the EU thresholds must comply with the standard timescales for procurement. For procurements below the thresholds the Council has discretion to apply their own timelines providing they are reasonable and proportionate.

Procurement in Liverpool City Council needs to follow an approved process with approvals sought in line with the CSO's.

It is hard to put a timeline on the various stages.

Tendering could be up to 4-12 months depending on complexity/approvals/partner agencies and willing stakeholders

Implementation could be several months depending on the size of the project (tree planting in the strand), if it's is seasonally dependent or just a couple of days (launching the floating ecosystems which were pre-made).

Experience is hard to judge because most installations were affected and impacted by covid so it is not a real situation.

5. Financing nature-based solutions

This section identifies the financial aspects for the implementation of NBS.

5.1 Financial plan: Budget breakdown for the construction of NBS.

Complete the additional expenses to the budget of the technical project that a local administration must take into account when making its financial plan. Among the additional concepts to be considered are: general expenses, industrial profit, taxes, quality control, health and safety coordination, construction management, designer, others. Please, specify the % cost increase of each concept (See section 5.1.1. from the D1.9 Guidelines to tendering process specifications report for more information about this question) (D1.9 Section 5.1)



Design Fees	10%
Site establishment	10%
Project Management	15%
CDM	5%
Contingency	7 -10%
Survey	10%
Optimism bias	5%

Plus Planning permission/licences etc – site/project specific
Establishment 10%

5.2 Funding opportunities.

Complete specific funding opportunities to implement NBS in your city/country. Classify these funds into international funds, national funds, regional or local specific funds. *(D1.9 Section 5.2)*

Local specific funds – section 106 funding

Urban Tree Challenge funds - national

Lottery Funding – national

Sponsorship/crowd funding- local

Other funding initiatives – city region funding (regional) /national initiatives and Government or DEFRA funding (national or regional) Environment agency funding (regional) etc. Many of these are thematic, restricted and time limited.

Mersey Forest can probably add more examples.

6. Practical information

This section provides practical information to public bidders from other cities to improve their bidding processes in the implementation of NBS. Share your experience with tips, recommendations, barriers, lessons learnt and questions and answers. Your experience is very welcome.

6.1 Tips and recommendations.

Add some tips and recommendations for the public procurers of other cities in the NBS tendering processes. *(D1.9 Section 6.1)*

Everything takes longer than you think

There may not be enough capacity to support you (we struggled getting local authority legal support and procurement support was halted during the pandemic)

Be prepared to do parts of other people's jobs as well to make things happen because if it is new or unfamiliar to them, they will need encouragement to progress it

Establish a clear budget at the beginning and get your finance team to help you monitor spend accurately

Seek different ways to get the end result – we ignored all initial refusals and pester people to help when needed.

Having some dedicated support would have been very useful to help maximise the benefits from each of the projects with more community consultation and involvement etc or the ability to seek match funding and/or engage new partners

If the work is new there won't be a process to follow so you need to make your own and try to establish all the necessary permissions etc as soon as possible.



6.2 Questions and answers.

Add some key questions and answers for the public procurers of other cities in the NBS tendering processes. *(D1.9 Section 6.2)*

How do you know what detail to specify to get good tenders for some of the NBS such as the floating island or which type of green wall?

We used external consultants to help us articulate and assess the tenders. We also used soft market testing feedback and information provided by suppliers which detailed key aspects of their products on web sites etc.

6.3 Challenges and barriers.

Describe the challenges and barriers that you face when implementing NBS in your city, and how to overcome them. *(D1.9 Section 6.3)*

NBS was not a priority during covid so there were delays.

Some staff were reluctant to engage as it meant more work in an unfamiliar area for them.

Addressing enquiries around ongoing maintenance.

Addressing enquiries about why some parts of the city were not benefitting.

No general fund for everyday things or quick purchases/services.

Political changes and differences of opinion on some schemes.

Consideration of all the issues can restrict final choice and design (e.g. for trees we need to consider issues such as Aphids, falling leaves, sticky fruit, any fruit, not too big, not too small, wind tolerant, low maintenance, not overhanging, native, biosecurity

External works can influence and affect delivery e.g. collapsed drain at a site delayed NBS.

Lack on local information e.g. Despite previously checking and testing there was no electricity to one of the lampposts identified which meant procuring an additional battery.

Some legal reviews delayed by months due to insufficient in-house capacity.

Option to install on a third party property (time issues on agreements/legal issues? Etc) so additional £200 for battery).

Work already delayed months for legal contracts and weeks to co-ordinate traffic management for delivery.

6.4 Lessons learnt.

Describe the lessons learnt that you would like to share with other cities to make the implementation of NBS easier. *(D1.9 Section 6.4)*

Expert support on technical issues and procurement was helpful as we could articulate what we want so we can be an informed client.

When more than 2 people are involved things are delayed e.g. procurement panel was delayed by sequential summer leave, bereavement leave etc and award delayed by 6 weeks.

Procurement questions need to be clear and numbered. Provide clarity on responses expected. Be clear no response = no score. Ask contractors to avoid submitting glossy brochures and lots of supporting info except as an addition as it takes ages to find the information you need for scoring.



Design and deliver skills don't always exist within the same company and tenders may need to reflect that.

Allow time for the unexpected – we had a procurement challenge from an unsuccessful contractor and then new fire regulations were brought in that involved additional calculations, approvals and higher costs.

Partners can be hard to work with, staff turnover can happen and some are slow to reply or change their mind or raise their costs ...keep smiling!

The standard of tenders returned was sometimes disappointing but it is hard to follow the public procurement process which is heavy on administration. Some contractors were put off by this.

6.5 Study cases.

You can add study cases that you experienced on the implementation of NBS through public procurement processes. These will serve as experiences for other cities. This section can include specific issues about the legal framework, types of procurement processes, burdens, etc.

Describe any aspects of your city or country that you want to include as a "case study" within the *D1.9 Guideline for tendering processes*, as a particular example, which may be useful for other cities and which have not been collected in any question in this questionnaire. For example, the Soft market testing delivered in Liverpool, etc. *(D1.9 Section 6.5)*

Soft Market Testing – In Liverpool as many of the NBS interventions proposed were 'new' to the city it was decided to undertake a soft market testing exercise to gauge the level of expertise and interest from contracting organisations. This approach also enabled us to ask for general cost estimates for certain types of works and how we could best group some elements of work for cost efficiencies and more attractive tender proposals. We received some feedback from interested contractors with some pricing guidelines and comments on how best to group various lots of works for future tender. The limited feedback helped to guide the final tender groupings and cost estimates as well as providing reassurance on attracting future tender submissions.

Case studies could be:

1. Green walls in Liverpool (2018)

Issues encountered were: Strengthening required for wall at one site, agreement on design, covid delays and lockdown part way through installation, additional permissions (noise surveys for scaffolding), challenge by unsuccessful contractor, new regulations coming into place for fire regulations and then the public feedback, which was great, and the fact the Mayor used the URBAN GreenUP green wall footage as the environment section to launch his updated city plan.

Soft Market Testing Start: End of September 2018

Soft Market Testing Finish: End October 2018

Analysis of feedback and preparation of formal tender lots: November 2018

Formal procurement Process Start: December 2018

Current market, establish the commercial interest in the various lots and seek market feedback on the most effective way to group the delivery lots and the level of costs that should be assigned to each of the procurement packages. Responses to the soft market testing exercise will be proactively sought and a number of key commercial and institutional bodies will be targeted to help ensure a good return of responses and to raise awareness of and interest in the formal tender opportunities that will follow.

It is estimated that consideration of feedback and preparation of the final procurement documentation will be completed by the end of November 2018.

Phase 2 – Formal Procurement Outline



Following analysis of the feedback from the soft market testing the final groupings and lots will be established together with a guide costing for each. During the tender process suppliers will be checked for capacity and capability before being assessed on their proposals and costs to undertake the project. This assessment will be undertaken using the council's Selection Questionnaire and tender templates. Timescales will vary slightly depending on the exact procurement route decided. However it is estimated that this work will commence formally in December 2018, with the award of contracts in May 2019 so that works can commence from September 2019.



Tendering process specification in the URBAN GreenUP cities¹

Questionnaire.

The aim of this questionnaire is to collect information about the tendering process specifications in the front-runner and follower cities of the URBAN GreenUP project. This information will be used to complete the report D1.9. Guidelines to tendering process specification.

Next to each question is indicated the section of the D1.9 report where the information provided in this questionnaire will be included, which can be used as a reference to better understand the question and its objective.

The questionnaire consists of 27 questions. Feel free to complete each question with the information you consider, using as many bullets, tables, charts and diagrams as possible, and adding more rows if needed.

Thank you in advance for your collaboration! We really appreciate your time!

City Profile Base Data

Stakeholder data.

Name of the City:

Izmir

Country:

Turkey

Role (for ex. Municipality department):

Municipality Project Management Department

Contact email/other:

sinanalperr@gmail.com

sibelkzn@gmail.com

berna.ataman@gmail.com

dyaygel1972@gmail.com

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1. Implementation of the Renaturing Urban Plan (RUP)

The aim of this question is to identify the methods that a local entity may use to develop NBS in its territory.

1.1 Implementing NBS in the city:

(D1.9 Section 2)

What are the different methods that you have to implement NBS in your city?

- ☒ Local authority through public procurement processes
- ☐ Local authority through business-as-usual activity
- ☐ Private owners/companies
- ☐ Public-private collaboration
- ☐ Other

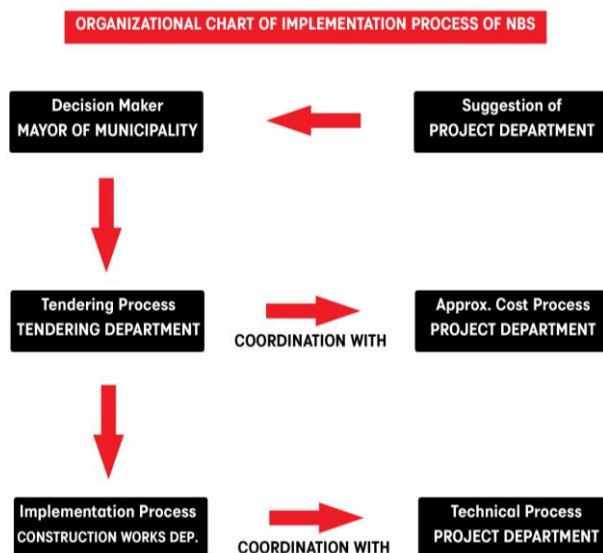
If Other, please, explain. Add some examples for every method.

2. Stakeholders

2.1 Share an organizational chart of your city council, and highlight the areas/department with responsibilities on the implementation of NBS.

(D1.9 Section 2.1)

Insert the organizational chart here (image, chart). Add as many explanations as you want.



2.2 Stakeholders in the execution of civil works in relation with the procurement procedure:

What are the stakeholders of the procurement process in the works contract? *(D1.9 Section 2.1.2)*

- ☒ Government board, responsible for the approval of the tender process and the successful bidder
- ☐ Contract authority, responsible for the administrative management of the contract
- ☐ Recruitment board, responsible for the technical and administrative evaluation

- ☒ Designer, architect/engineer responsible for the technical project signature
- ☒ Contractor, in charge of the contract implementation
- ☐ Works manager, in charge of the general management of the implementation
- ☒ Municipal supervisor, responsible for the administrative supervision and technical advice
- ☐ Other

If other, please complete.

3. Legal framework

(D1.9 Section 3)

Name and describe the main laws regarding the implementation of NBS through public procurement processes, at the supranational (international), national, regional and local levels. Please include a short description and main characteristics. Add as many rows as needed.

We would also like to highlight study cases for the cities (D1.9 Section 3.4). You can include specific study cases, for example, Green procurement law in Italy (MAN).

3.1 Supranational laws.

3.2 National laws.

The procurement of all purchasing of goods and services, construction and civil works are carried out according to the provisions of Public Procurement Law No. 4734 and dated 04.01.2002 by Izmir Metropolitan Municipality².

Although, the municipalities in Turkey has the authority to independently conduct the tender for works, they are obliged to act in accordance with national procurement law. They cannot form a regulation, legislation etc. other than this law. The municipality shall act according to the results of its own feasibility studies on issues such as the grouping of the interventions to be tendered, the number of interventions per tender, the budget and the area of the interventions with following the tendering procedure, provided for by law.

3.3 Regional laws.

3.4 Local laws.

Include also the local urban planning instrument. F.e. *Plan General de Ordenación Urbana 2020. Valladolid.*

(D1.9 Section 3.3. and 3.3.1)

² (Web access: http://www2.ihale.gov.tr/english/4734_English.pdf)



4. Public procurement procedures

This section identifies the characteristics of the public tendering processes in your country.

4.1 Types of public contracts.

What are the types of public contracts? Add some examples of the implementation of NBS for each type of contract. (D1.9 Section 4.1)

- ☒ Works contract (f.e. construction of a green wall) Examples: Parklets, Green Car Park Covering Shelter
- ☐ Supply contract (f.e. purchase of trees) Examples: _____
- ☐ Service contract (f.e. Soil permeability tests) Examples: _____
- ☐ Other.

If other, please complete type of contract and add some examples.

4.2 Types of public procurement procedures.

What are the types of public procurement procedures? (D1.9 Section 4.2)

- ☒ Open procedure
- ☒ Restricted procedure
- ☒ Negotiated procedure
- ☐ Negotiated procedure without prior publication
- ☐ Competitive dialogue
- ☐ Innovation partnership
- ☒ Direct procurement (please answer 4.2.1)
- ☐ Minor contract (please answer 4.2.2)
- ☐ Project competition
- ☐ Other

If other, please complete and provide a short description.

4.2.1. Direct procurement. Describe the main characteristics and thresholds.

The method of direct procurement may be applied in the following cases without advertising and without receiving any securities:

- a) when it is established that the needs can be met from only one natural or legal person,
- b) in case only one single natural or legal person has exclusive rights with regard to the need in question,
- c) procurement of goods and services which are necessarily supplied from the real or legal person who is the initial supplier/ service provider, to ensure compatibility and standardization with existing goods, equipment, technology or services by means of contracts to be arranged based on the principal contract and not exceeding three-year period in total,



- d) procurements not exceeding fifteen billion Turkish Liras for needs of contracting authorities within the boundaries of metropolitan municipalities and procurements not exceeding five billion Turkish Liras for needs of other contracting authorities, and purchases with regard to accommodation, trip and subsistence within the scope of representation expenses,
- e) purchase or lease of immovable property according to need of the contracting authority,
- f) procurement of medicine, vaccination, serum, antiserum, blood and blood products which are not economically stored due to their nature and necessity to use in a definite time interval or used in urgent cases, and medical consuming materials whose appliance can be decided during practice and peculiar to patient such as orthosis, prothesis, and procurement of consuming materials for test and analysis,
- g) procurements of services from advocates having Turkish or foreign nationality or from advocacy partnerships in order to represent and defend the contracting authorities covered in the Law, in lawsuits with regard to disputes which proposed to be settled by international arbitration,
- h) services procurements from Turkish or foreign nationality advocates pursuant to Articles 22 and 36 of Law No: 4353, dated 08.01.1943, and services procurements in order to register the intellectual and industrial properties by national and international institutions,
- i) procurements of services by Turkish Labor Authority regarding its duties stated in the subparagraphs (b) and (c) of the third article of Law No: 4904, dated 25.06.2003; and also, its duties stated in the seventh subparagraph of article 48 of the Unemployment Insurance Law, numbered 4904, and dated 25.08.1999,
- j) In cases where it is determined to renew the elections before the end of regular term, or to go to off year elections, or to hold a referendum on constitutional changes; procurement of watermarked voting paper and watermarked voting envelope paper and procurement of printing services by Supreme Election Board, and in case of local elections procurement of printing services of voting paper by the chairmanships of Provincial Election Boards.

4.2.2. Minor contract. Describe the main characteristics and thresholds.

4.2.3. Main procedure for NBS. According to your experience, please write the main public procedure for the implementation of NBS in your city. For example, open procedure and minor contract.

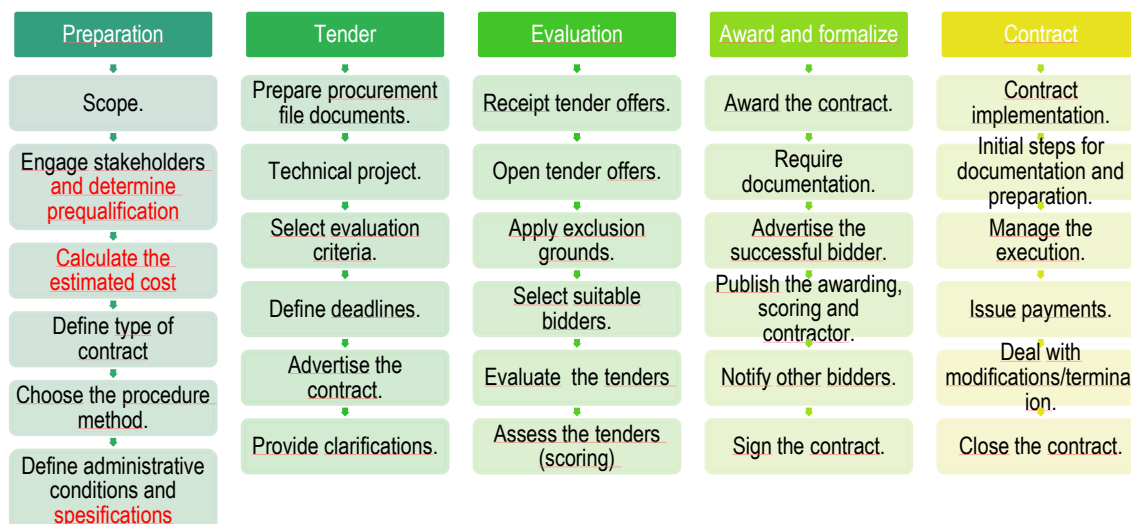
Main Public Procedure of the NBS in our city is Open Procedure.

4.3 The public procurement process.

4.3.1. Stages of the public procurement process.

Adapt the following diagram to the stages of the procurement process in your city, by adding/deleting/modifying stages. Add any comment below the diagram, if needed. (D1.9 Section 4.3)





4.3.2. Key stages. Identify what are the key stages and provide the reasons why you answered that. Add as many stages and explanations as you wish. *(D1.9 Section 4.3)*

There are many key stages but the technical project is the important one because all the tendering process has connection with the project such as preparation of procurement documents, quality of constructors, the estimated cost of the tender etc.

4.4 Phase 1. Preparation of the tendering process.

4.4.1. Public procurement documents. The following documents for the public procurement administrative file are identified: Technical project, Administrative conditions, Technical conditions, Financial report and Legal report. What are the documents that you must prepare as part of the administrative file for the public procurement? Add the name of documents and explain the content and purpose. *(D1.9 Section 4.3. Tender documents file)*

Technical Project: The technical project includes the technical implementation project and technical specification depending on the subject of the tender. The technical criteria for the goods, services and works to be procured shall be specified in the technical specifications, which constitute an integral part of the tender documents.

Administrative Conditions: Preparation of administrative specifications, specifying all characteristics of the goods, services and works that constitute the subject matter of the procurement belongs to the administrations.

4.4.2. Criteria for division in lots. Share your criteria for the division (or not) of a procurement contract in lots. Difference the legal criteria from the criteria you get from experience. *(D1.9 Section 4.3. Division in lots)*

The most important criteria in tender processes is **not to divide procurement contracts in lots** if not necessary. Although there are no criteria in the laws, it is the priority choice for the administration to complete the applications with minimum divisions. Because the division creates extra work and wasting time for the administration, not only in tendering process but also in implementation process. However, seasonal conditions, the implementation and financial capacity of the contractors and the tender schedule are an important factor in dividing the procurement contract in lots.

4.4.3. Criteria for the evaluation of the tendering offers.

Share your criteria for the evaluation of the procurement offers in terms of criteria that can be evaluated mathematically by means of a formula (objective), and criteria that can not be evaluated through a formula (subjective). Add the suggested % for scoring (from 0-100%). Complete and edit the following table. *(D1.9 Section 4.3.Criteria for NBS evaluation)*

Price / Cost	Contracting authorities shall base the award of public contracts on the most economically advantageous tender, understood as lowest price per unit or total costs for implementation. <i>Examples: €/tree. €/m² vertical garden. [Add other examples]</i> <i>Examples IZM: 500 €/ Pollinator's module, 3 €/m² fruit walls, 40 €/planting trees</i>	100%
Increase in scope	Increase in the number of units with no additional cost. <i>Examples: plant a higher number of trees, increase km of cycle lane, increase green surface, add more pollinator's modules, increase m² of SUDs.</i> <i>Examples IZM: Add more pollinator's modules, increase green surface</i>	0%
Reduce the execution time	The shortening of the project's execution time increases the effectiveness of the implementation. Establish the measure in calendar days or in working days. <i>Examples: Reduction of execution by 10 working days.</i>	0%
Life cycle analysis	Environmental criteria to the solution with the less life cycle analysis cost. <i>Examples: Distance between the supplier and the final destination.</i>	0%
	<i>[Please add/delete]</i>	
	Scoring (0% - 100%)	100%

4.5 Phase 2. Tender publication.

4.5.1. Contract notice.

Write the name and web address of the contracting platform where the bidding processes are published in your city and/or country. *(D1.9 Section 4.3.Phase 2 Contract notice)*

Electronic Public Procurement Platform: ekap.kik.gov.tr

4.6 Phase 3. Evaluation.

Note if the evaluation of proposals in a tendering procedure is through the opening of two envelopes, the administrative and the technical-economic offer. Describe shortly the process in your city/country. *(D1.9 Section 4.3.Phase 3 Evaluation)*

- All documents required under the rules of participation in the procurement including the tender letter and the tender security shall be placed in an envelope.
- The tender letter shall be submitted in writing and signed. It is mandatory to indicate in the tender letter that the tender documents are fully read and accepted; the offered price is written clearly.
- The tenders shall be submitted to the contracting authority no later than the date and hour specified in the tender documents.
- The tenders shall be submitted to the contracting authority until the time stated for submission of tenders in the tender documents.

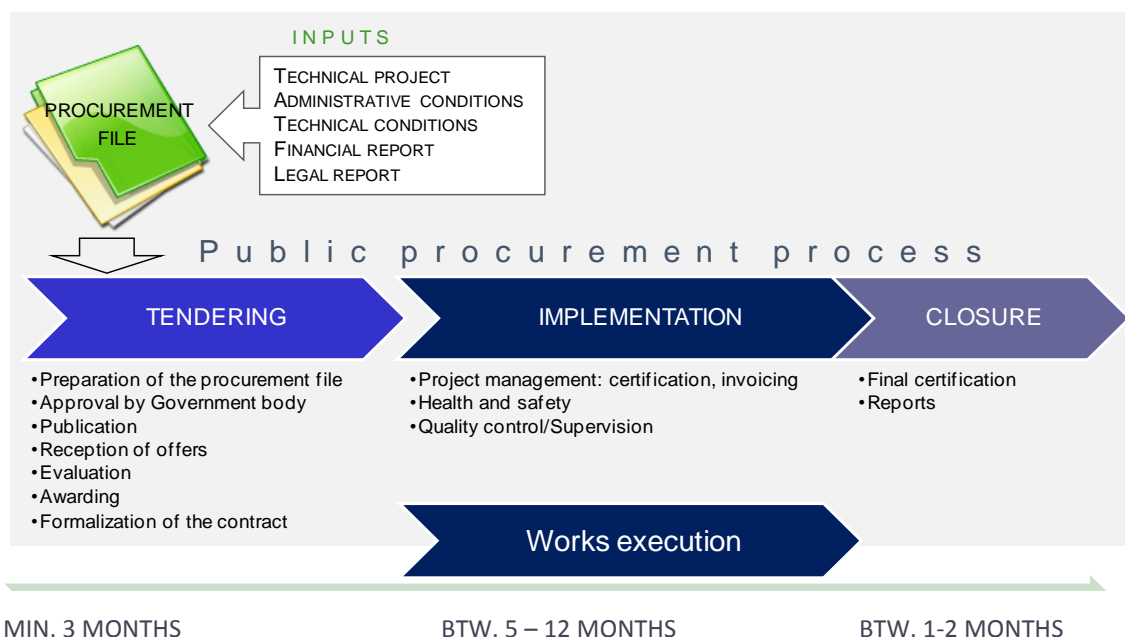


- Upon the request of tender commission, the contracting authority may ask the tenderers to clarify their tenders in writing on the unclear aspects of the tender.
- The tender commission shall evaluate the tenders and shall determine those that are abnormally low compared to the other tenders or the estimated cost determined by the contracting authority.
- The tender commission shall evaluate the abnormally low tenders taking into consideration the written explanations documented on the following aspects:
 - a) economic nature of the manufacturing process, the services provided and the method of works,
 - b) selected technical solutions and advantageous conditions to be utilized by the tenderer in supply of the goods and services or fulfilment of the works,
 - c) the originality of the goods, services or civil works proposed.

4.7 Timescale for the Open procedure.

The aim of this diagram is to establish an average duration of the typical tendering process by open procedure, to complete the detailed table in Annex I. Schedule of civil Works procurement by Open procedure (see Annex I for further clarifications).

Create a diagram of the basic phases of the public procurement process of your country/city, as well as include the duration of each period, in legal terms (according to the applicable Public Sector Contracts Law) and in real terms (experience). Include the diagram here or as an attached document. (D1.9 Section 4.4)



Duration of tendering process changes according to the procurement method, estimated cost and capacity of the implementations.

5. Financing nature-based solutions

This section identifies the financial aspects for the implementation of NBS.

5.1 Financial plan: Budget breakdown for the construction of NBS.

Complete the additional expenses to the budget of the technical project that a local administration must take into account when making its financial plan. Among the additional concepts to be considered are: general expenses, industrial profit, taxes, quality control, health and safety coordination, construction management, designer, others. Please, specify the % cost increase of each concept (See section 5.1.1. from the *D1.9 Guidelines to tendering process specifications* report for more information about this question) *(D1.9 Section 5.1)*

SUMMARY OF THE TENDER BUDGET

Implementation budget (no VAT) – 95%

Project design and drawing (include 18% VAT) – 5%

Construction management (include 18% VAT) – 5%

All additional expenses included in implementation budget. Such as general expenses, industrial benefit, quality control, health and safety coordination.

5.2 Funding opportunities.

Complete specific funding opportunities to implement NBS in your city/country. Classify these funds into international funds, national funds, regional or local specific funds. *(D1.9 Section 5.2)*

Horizon 2020

Municipality own budget

Private Investors

Sponsorship funds

6. Practical information

This section provides practical information to public bidders from other cities to improve their bidding processes in the implementation of NBS. Share your experience with tips, recommendations, barriers, lessons learnt and questions and answers. Your experience is very welcome.

6.1 Tips and recommendations.

Add some tips and recommendations for the public procurers of other cities in the NBS tendering processes. *(D1.9 Section 6.1)*

- Explain all the details of the projects to the citizens before you start the implementation
- Set the seasonally suitable climatic conditions of your implementation process.
- Use local materials instead of imported material.

6.2 Questions and answers.

Add some key questions and answers for the public procurers of other cities in the NBS tendering processes. *(D1.9 Section 6.2)*

- How do you arrange your implementations during different climatic conditions?
- Do you supervise the projects with your own municipality team or get support from outside?
- How do you manage the budget?



6.3 Challenges and barriers.

Describe the challenges and barriers that you face when implementing NBS in your city, and how to overcome them. *(D1.9 Section 6.3)*

- Managing the project budget with variable exchange rate differences
- Difficulty in supplying imported products, especially during the pandemic process
- Working with different units within the municipality for different applications
- Contractor companies not having sufficient qualified technical staff and machinery
- Increase in manufacturing and inability to manage time due to unpredictable problems in the field
- Budget management is difficult due to extra manufacturing
- Budget management becomes difficult as both the municipal budget and the grant budget are spent on manufacturing
- Lack of expert technical personnel within the municipality for specific works
- The victimization experienced by the local people during the manufacturing process and their opposition to some practices, their complaints

6.4 Lessons learnt.

Describe the lessons learnt that you would like to share with other cities to make the implementation of NBS easier. *(D1.9 Section 6.4)*

- Learning the budget management along with the manufacturing process
- Coordination with different units within the municipality
- Ensuring project management by including the people living around the implementations in the project process
- Following the implementation of the drawn technical project in the field, determining the difficulties experienced
- The project, tender and construction process are processes that are not independent from each other, but must be considered together
- Learning vegetative manufacturing and maintenance processes especially in vegetative landscape projects

6.5 Study cases.

You can add study cases that you experienced on the implementation of NBS through public procurement processes. These will serve as experiences for other cities. This section can include specific issues about the legal framework, types of procurement processes, burdens, etc.

Describe any aspects of your city or country that you want to include as a "case study" within the *D1.9 Guideline for tendering processes*, as a particular example, which may be useful for other cities and which have not been collected in any question in this questionnaire. For example, the Soft market testing delivered in Liverpool, etc. *(D1.9 Section 6.5)*



Tendering process specification in the URBAN GreenUP cities¹

Questionnaire.

The aim of this questionnaire is to collect information about the tendering process specifications in the front-runner and follower cities of the URBAN GreenUP project. This information will be used to complete the report D1.9. Guidelines to tendering process specification.

Next to each question is indicated the section of the D1.9 report where the information provided in this questionnaire will be included, which can be used as a reference to better understand the question and its objective.

The questionnaire consists of 27 questions. Feel free to complete each question with the information you consider, using as many bullets, tables, charts and diagrams as possible, and adding more rows if needed.

Thank you in advance for your collaboration! We really appreciate your time!

City Profile Base Data

Stakeholder data.

Name of the City:

Mantova

Country:

Italy

Role (for ex. Municipality department):

Civil Works of Municipality dept

Contact email/other:

marcella.ghidoni@comune.mantova.gov.it

roberta.marchioro@comune.mantova.gov.it;

elisa.parisi@comune.mantova.gov.it

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1. Implementation of the Renaturing Urban Plan (RUP)

The aim of this question is to identify the methods that a local entity may use to develop NBS in its territory.

1.1 Implementing NBS in the city:

(D1.9 Section 2)

What are the different methods that you have to implement NBS in your city?

☒ Local authority through public procurement processes

☒ Local authority through business as usual activity

☐ Private owners/companies

☐ Public-private collaboration

☐ Other

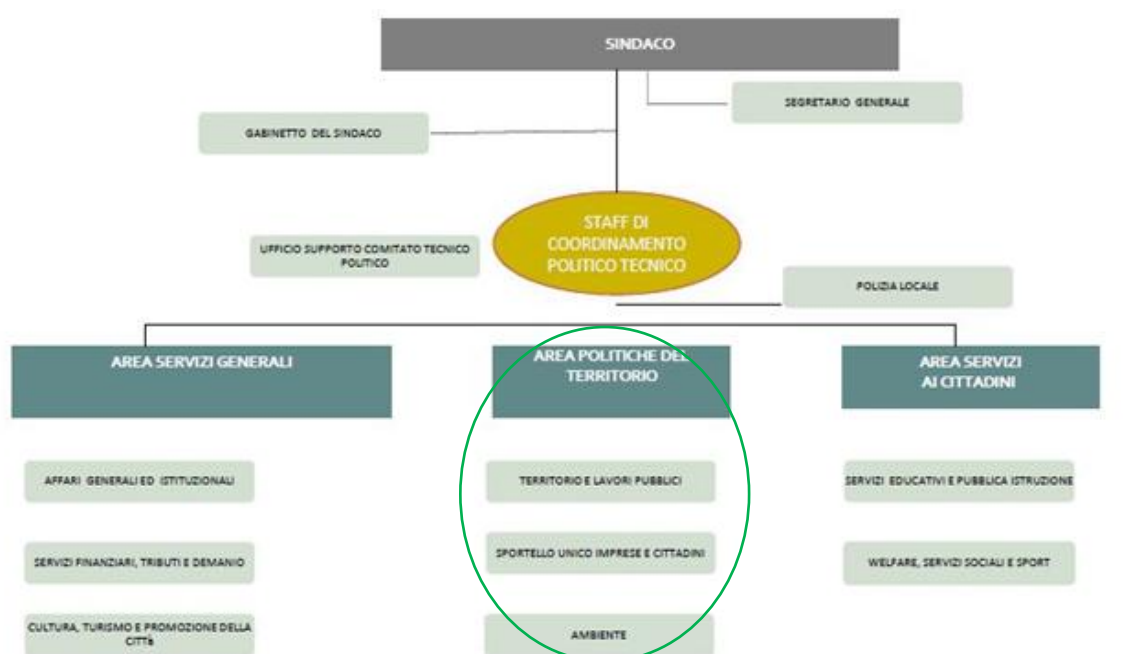
If Other, please, explain. Add some examples for every method.

2. Stakeholders

2.1 Share an organizational chart of your city council, and highlight the areas/department with responsibilities on the implementation of NBS.

(D1.9 Section 2.1)

Insert the organizational chart here (image, chart). Add as many explanations as you want.



Civil Works Dept- Civic Works Dept has the task of evaluating and verifying the possibility of NBS use instead of traditional solutions.

Urbanistic and environmental dpts - Urban and Environmental Departments have the task of introduce NBS in urban city planning. They can prescribe NBS as solution to mitigate and compensate negative impacts of other project.

Private Buildings Authority department - Private Buildings Authority Department has the role of controlling private transformations that involve NBS. The future building regulations could foresee a specific section dedicated to NBS.

2.2 Stakeholders in the execution of civil works in relation with the procurement procedure:

What are the stakeholders of the procurement process in the works contract? (D1.9 Section 2.1.2)

- ☐ Government board, responsible for the approval of the tender process and the successful bidder
- ☒ Contract authority, responsible for the administrative management of the contract
- ☒ Recruitment board, responsible for the technical and administrative evaluation
- ☒ Designer, architect/engineer responsible for the technical project signature
- ☒ Contractor, in charge of the contract implementation
- ☒ Works manager, in charge of the general management of the implementation
- ☒ Municipal supervisor, responsible for the administrative supervision and technical advice
- ☐ Other

If other, please complete.

3. Legal framework

(D1.9 Section 3)

Name and describe the main laws regarding the implementation of NBS through public procurement processes, at the supranational (international), national, regional and local levels. Please include a short description and main characteristics. Add as many rows as needed.

We would also like to highlight study cases for the cities (D1.9 Section 3.4). You can include specific study cases, for example, Green procurement law in Italy (MAN).

3.1 Supranational laws.

European directives 2014/23/UE, 2014/24/UE, 2014/25/ UE

3.2 National laws.

Public contracts law D. Lgs. 50/2016

Law 10/2013 green public development

D.M. 63, 10/03/2020 Minimum Environmental Criteria in green public contract

Green public Procurement: The national law on public procurement obliges all Italian Public Bodies to adopt Green Public Procurement in their tendering process for green public areas. These Criteria are called Minimum Environmental Criteria.

There are specific areas of application such as buildings, streets, public lights ect.

In particular, in 2020 Italy approved new tendering process guidelines about:

1. planning of new green areas , renovation of other one,
2. management of public green areas
3. products furniture for green maintenance

The law gives some CRITERIA in planning service of new green areas and in renovation areas.

The law recommends to public body :

- to have a Green Plan for the developing of future actions on green public areas



- To join, to link residual and periferic areas
- To develop florovivaistic furnitures throught cultivation contracts

About the category of Green Public Procurement for buldings there are for example some criteria such as : soil consumption and permeability more than 60% of the area, Canopy area minimum for 40%, draining materials

For new green areas there are some specific criteria for the selection of species that increase the resilience of green areas (for example water management , hydric purpose)

3.3 Regional laws.

Ecological regional network.

Hydraulic invariance.

3.4 Local laws.

Include also the local urban planning instrument. F.e. *Plan General de Ordenación Urbana 2020. Valladolid.* (D1.9 Section 3.3. and 3.3.1)

General Urban Plan PGT – Mobility sustainable Urban Plan PUMS – Civil Works Plan and budget – Building regulation.

Es. Campo Canoa parking area, Fiera Catena cycle path.

4. Public procurement procedures

This section identifies the characteristics of the public tendering processes in your country.

4.1 Types of public contracts.

What are the types of public contracts? Add some examples of the implementation of NBS for each type of contract. (D1.9 Section 4.1)

☐ Works contract (f.e. construction of a green wall) Examples: _____

☐ Supply contract (f.e. purchase of trees) Examples: _____

☒ x contract (f.e. Soil permeability tests) Examples: *the Green Public Management Service has planting of new trees, implementation of technological irrigation systems, green management differentiation, mulching system for mowing without waste production.*

☐ Other.

If other, please complete type of contract and add some examples.

public/private contracts in urbanistic procedure

4.2 Types of public procurement procedures.

What are the types of public procurement procedures? (D1.9 Section 4.2)

X Open procedure

X Restricted procedure

X Negotiated procedure

☐ Negotiated procedure without prior publication

☐ Competitive dialogue



- ☐ Innovation partnership
- ☐ Direct procurement (please answer 4.2.1)
- ☐ Minor contract (please answer 4.2.2)
- ☐ Project competition
- ☐ Other

If other, please complete and provide a short description.

Rewards Criteria for the projects with best solutions in technical offer.

4.2.1. Direct procurement. Describe the main characteristics and thresholds.

4.2.2. Minor contract. Describe the main characteristics and thresholds.

4.2.3. Main procedure for NBS. According to your experience, please write the main public procedure for the implementation of NBS in your city. For example, open procedure and minor contract.

NBS such as Rewards Criteria for public tender.

The choice of the subject who realize the project is done by assigning scores depending on 80% on improvement project proposal and 20% based on economic discount. We can apply many environmental criteria, for example a subject with environmental certification has higher score than one without certification. An other example is a subject that uses low emissions vehicles or means of transport or reduced consumptions of fossil fuels, use of renewable energies. Other example : environmental and quality certified products. Other, social criteria as disadvantaged personal use.

4.3 The public procurement process.

4.3.1. Stages of the public procurement process.

Adapt the following diagram to the stages of the procurement process in your city, by adding/deleting/modifying stages. Add any comment below the diagram, if needed. (D1.9 Section 4.3)

Tender Criteri premianti





4.3.2. Key stages. Identify what are the key stages and provide the reasons why you answered that. Add as many stages and explanations as you wish. *(D1.9 Section 4.3)*

Select evaluation criteria

technical project

rewarding criteria

Manage and execution. In fact in this step you can be more incisive on resilience aspects.

4.4 Phase 1. Preparation of the tendering process.

4.4.1. Public procurement documents. The following documents for the public procurement administrative file are identified: Technical project, Administrative conditions, Technical conditions, Financial report and Legal report. What are the documents that you must prepare as part of the administrative file for the public procurement? Add the name of documents and explain the content and purpose. *(D1.9 Section 4.3.Tender documents file)*

Technical project.

Administrative conditions and legal conditions (By legal office and tender office)

4.4.2. Criteria for division in lots. Share your criteria for the division (or not) of a procurement contract in lots. Difference the legal criteria from the criteria you get from experience. *(D1.9 Section 4.3.Division in lots)*

Public green management contract not divided into lots. It includes all the main features for global management. The contract lasts 10 years and guarantees to optimize the processes both from an economic and technical point of view, in particular for NBS.

An example: differentiated mowing of grass in relation to extensive or intensive use

4.4.3. Criteria for the evaluation of the tendering offers.

Share your criteria for the evaluation of the procurement offers in terms of criteria that can be evaluated mathematically by means of a formula (objective), and criteria that can not be evaluated through a formula (subjective). Add the suggested % for scoring (from 0-100%). Complete and edit the following table. *(D1.9 Section 4.3.Criteria for NBS evaluation)*

Price / Cost	Contracting authorities shall base the award of public contracts on the most economically advantageous tender, understood as lowest price per unit or total costs for implementation. <i>Examples: €/tree. €/m² vertical garden. [Add other examples]</i> Lower price on all the budget project	20%
Increase in scope	Increase in the number of units with no additional cost. <i>Examples: plant a higher number of trees, increase km of cycle lane, increase green surface, add more pollinator's modules, increase m² of SUDs.</i> Rewarding criteria	60%
Reduce the execution time	The shortening of the project's execution time increases the effectiveness of the implementation. Establish the measure in calendar days or in working days. <i>Examples: Reduction of execution by 10 working days.</i> Reduction of execution working days	10%
Life cycle analysis	Environmental criteria to the solution with the less life cycle analysis cost. <i>Examples: Distance between the supplier and the final destination.</i> Manage after construction	10%
Scoring (0% - 100%)		100%

4.5 Phase 2. Tender publication.

4.5.1. Contract notice.

Write the name and web address of the contracting platform where the bidding processes are published in your city and/or country. (D1.9 Section 4.3.Phase 2 Contract notice)

SINTEL <https://www.arca.regione.lombardia.it/wps/portal/ARCA/Home/e-procurement/piattaforma-sintel>

4.6 Phase 3. Evaluation.

Note if the evaluation of proposals in a tendering procedure is through the opening of two envelopes, the administrative and the technical-economic offer. Describe shortly the process in your city/country. (D1.9 Section 4.3.Phase 3 Evaluation)

The evaluation of proposal in a tendering procedure is through the opening of two envelopes, the administrative and the technical economic offer. The opening is separate and is during two different moment from two different persons.

The first one is the administrative envelope that is opened first of all from the commission. The commission is composed by the responsible for the procedure and from two municipality officers of the contract office. In this first step there are administrative checks. Later there are the technical checks by an other specific technical commission composed by experticians in the subject of the tender.

4.7 Timescale for the Open procedure.

The aim of this diagram is to establish an average duration of the typical tendering process by open procedure, to complete the detailed table in Annex I. Schedule of civil Works procurement by Open procedure (see Annex I for further clarifications).

Create a diagram of the basic phases of the public procurement process of your country/city, as well as include the duration of each period, in legal terms (according to the applicable Public Sector Contracts Law) and in real terms (experience). Include the diagram here or as an attached document. (D1.9 Section 4.4)



Final design	150 days (5 months)
Executive design	60 days (2 months)
Designs Approval	120 days (4 months)
Awarding works	90 days (3 months)
Work execution	210 days (7 months)
Testing/end execution	30 days (1 month)
Total	620 days (20 months = 1,7 years)

5. Financing nature-based solutions

This section identifies the financial aspects for the implementation of NBS.

5.1 Financial plan: Budget breakdown for the construction of NBS.

Complete the additional expenses to the budget of the technical project that a local administration must take into account when making its financial plan. Among the additional concepts to be considered are: general expenses, industrial profit, taxes, quality control, health and safety coordination, construction management, designer, others. Please, specify the % cost increase of each concept (See section 5.1.1. from the *D1.9 Guidelines to tendering process specifications* report for more information about this question) *(D1.9 Section 5.1)*

Technical budget: 10-15% of the total budget. In this budget there aren't administrative internal budget. 10 % is for Project drawing and construction management of engineer /architect.

For NBS developed by civil works, the maintenance costs are defined in advance, and allocated inside municipal budget. While for the private NBS the maintenance costs are not defined in advance in the contract with private, as we do for conventional green areas. The maintenance works (at least for the years following the construction and until the transfer of the private area to the public) is foreseen in the contract but not counted as a cost.

5.2 Funding opportunities.

Complete specific funding opportunities to implement NBS in your city/country. Classify these funds into international funds, national funds, regional or local specific funds. *(D1.9 Section 5.2)*

H2020, Rural Development Regional Programme

6. Practical information

This section provides practical information to public bidders from other cities to improve their bidding processes in the implementation of NBS. Share your experience with tips, recommendations, barriers, lessons learnt and questions and answers. Your experience is very welcome.

6.1 Tips and recommendations.

Add some tips and recommendations for the public procurers of other cities in the NBS tendering processes. *(D1.9 Section 6.1)*

6.2 Questions and answers.

Add some key questions and answers for the public procurers of other cities in the NBS tendering processes. *(D1.9 Section 6.2)*

6.3 Challenges and barriers.

Describe the challenges and barriers that you face when implementing NBS in your city, and how to overcome them. *(D1.9 Section 6.3)*

The biggest barrier is the private. There is not enough knowledge on NBS and resilience.

The organization of different seminars and conference on this subject

6.4 Lessons learnt.

Describe the lessons learnt that you would like to share with other cities to make the implementation of NBS easier. *(D1.9 Section 6.4)*

6.5 Study cases.

You can add study cases that you experienced on the implementation of NBS through public procurement processes. These will serve as experiences for other cities. This section can include specific issues about the legal framework, types of procurement processes, burdens, etc.

Describe any aspects of your city or country that you want to include as a "case study" within the *D1.9 Guideline for tendering processes*, as a particular example, which may be useful for other cities and which have not been collected in any question in this questionnaire. For example, the Soft market testing delivered in Liverpool, etc. *(D1.9 Section 6.5)*

Tendering process specification in the URBAN GreenUP cities¹

Questionnaire.

The aim of this questionnaire is to collect information about the tendering process specifications in the front-runner and follower cities of the URBAN GreenUP project. This information will be used to complete the report D1.9. Guidelines to tendering process specification.

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Thank you in advance for your collaboration! We really appreciate your time!

City Profile Base Data

Stakeholder data.

Name of the City:

City of Ludwigsburg

Country:

Germany

Role (for ex. Municipality department):

executive department climate & energy

Contact email/other:

a.krafft@ludwigsburg.de

¹ This publication has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 730426 (URBAN GreenUP)

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1. Implementation of the Renaturing Urban Plan (RUP)

The aim of this question is to identify the methods that a local entity may use to develop NBS in its territory.

1.1 Implementing NBS in the city:

(D1.9 Section 2)

What are the different methods that you have to implement NBS in your city?

☒ Local authority through public procurement processes

☒ Local authority through business as usual activity

☐ Private owners/companies

☒ Public-private collaboration

☐ Other

If Other, please, explain. Add some examples for every method.

We built a "green room" near city hall a few years ago. There was a cooperation with a landscape gardener. We will also soon be installing water dispenser in the city. The purchase costs for this will be covered by the public utilities. However, the utilities is a municipal company and not really "private".

2. Stakeholders

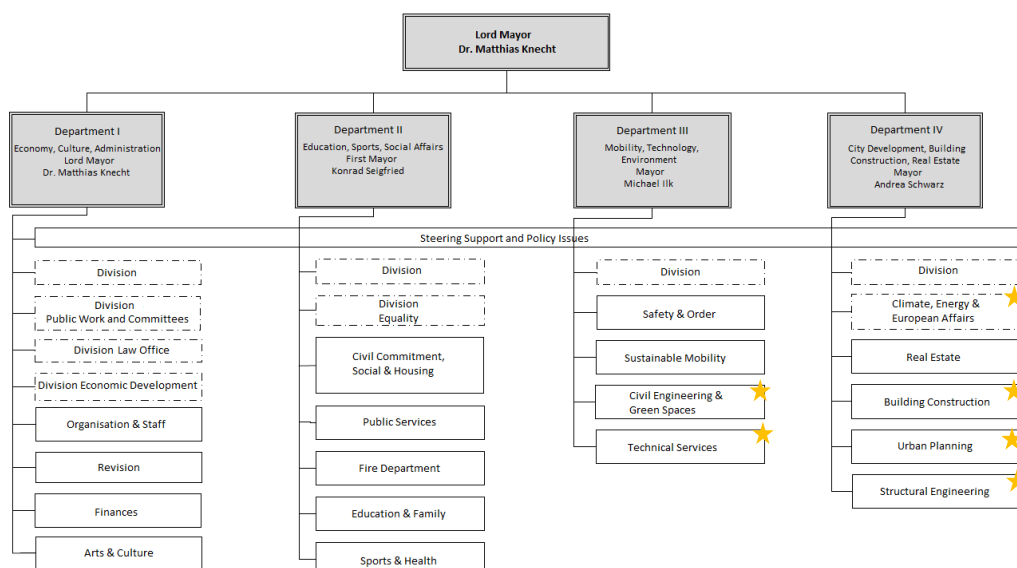
2.1 Share an organizational chart of your city council, and highlight the areas/department with responsibilities on the implementation of NBS.

(D1.9 Section 2.1)

Insert the organizational chart here (image, chart). Add as many explanations as you want.



Organization chart - City of Ludwigsburg



- Climate, Energy & European Affairs: Coordination of all climate-related issues.
- Building Construction: Are responsible for the buildings within the city and can determine measures there.

- Urban Planning: Long-term planning of urban development; determine the location of measures.
- Structural Engineering: Are responsible for all structural changes in the city and must determine the legal framework.
- Civil Engineering & Green Spaces: All civil engineering measures are controlled and supervised here.
- Technical Services: Are responsible for the maintenance and the achievement of measures.

2.2 Stakeholders in the execution of civil works in relation with the procurement procedure:

What are the stakeholders of the procurement process in the works contract? (D1.9 Section 2.1.2)

X Government board, responsible for the approval of the tender process and the successful bidder

X Contract authority, responsible for the administrative management of the contract

☐ Recruitment board, responsible for the technical and administrative evaluation

x Designer, architect/engineer responsible for the technical project signature

X Contractor, in charge of the contract implementation

X Works manager, in charge of the general management of the implementation

X Municipal supervisor, responsible for the administrative supervision and technical advice

☐ Other

If other, please complete.

3. Legal framework

(D1.9 Section 3)

Name and describe the main laws regarding the implementation of NBS through public procurement processes, at the supranational (international), national, regional and local levels. Please include a short description and main characteristics. Add as many rows as needed.

We would also like to highlight study cases for the cities (D1.9 Section 3.4). You can include specific study cases, for example, Green procurement law in Italy (MAN).

3.1 Supranational laws.

3.2 National laws.

Vergabe- und Vertragsordnung für Bauleistungen - Teil A (VOB/A); Vergabe- und Vertragsordnung für Leistungen – Teil B (VOL/B)

3.3 Regional laws.

VwV Beschaffung

3.4 Local laws.

Include also the local urban planning instrument. F.e. *Plan General de Ordenación Urbana 2020. Valladolid.* (D1.9 Section 3.3. and 3.3.1)



“Dienstanweisung der Stadt Ludwigsburg über die Vergabe von Liefer- und Dienstleistungen” (DA Vergabe VOL); “Klimaanpassungskonzept der Stadt Ludwigsburg” (Klik), Flächennutzungsplan der Stadt (FNP), Bebauungspläne, Stadtentwicklungskonzept (SEK), Freichflächenentwicklungskonzept

4. Public procurement procedures

This section identifies the characteristics of the public tendering processes in your country.

4.1 Types of public contracts.

What are the types of public contracts? Add some examples of the implementation of NBS for each type of contract. *(D1.9 Section 4.1)*

- ☐ Works contract (f.e. construction of a green wall) Examples: Planting, Unsealing
- ☐ Supply contract (f.e. purchase of trees) Examples: purchase of plants and materials
- ☐ Service contract (f.e. Soil permeability tests) Examples: Water dispenser maintenance
- ☐ Other.

If other, please complete type of contract and add some examples.

4.2 Types of public procurement procedures.

What are the types of public procurement procedures? *(D1.9 Section 4.2)*

- ☒ Open procedure
- ☒ Restricted procedure
- ☒ Negotiated procedure
- ☒ Negotiated procedure without prior publication
- ☐ Competitive dialogue
- ☐ Innovation partnership
- ☐ Direct procurement (please answer 4.2.1)
- ☐ Minor contract (please answer 4.2.2)
- ☒ Project competition
- ☐ Other

If other, please complete and provide a short description.

4.2.1. Direct procurement. Describe the main characteristics and thresholds.



4.2.2. Minor contract. Describe the main characteristics and thresholds.

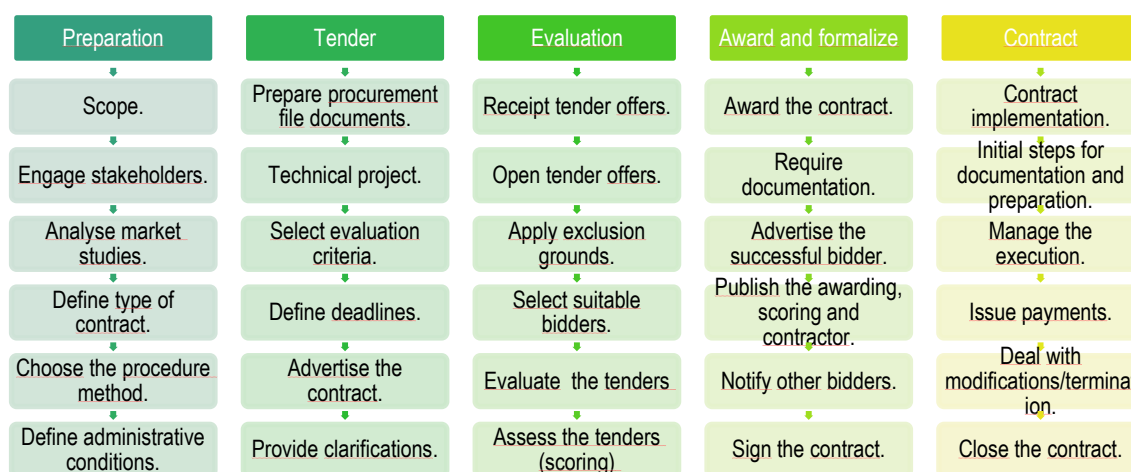
4.2.3. Main procedure for NBS. According to your experience, please write the main public procedure for the implementation of NBS in your city. For example, open procedure and minor contract.

Open procedure.

4.3 The public procurement process.

4.3.1. Stages of the public procurement process.

Adapt the following diagram to the stages of the procurement process in your city, by adding/deleting/modifying stages. Add any comment below the diagram, if needed. (D1.9 Section 4.3)



4.3.2. Key stages. Identify what are the key stages and provide the reasons why you answered that. Add as many stages and explanations as you wish. (D1.9 Section 4.3)

The process varies depending on the size of the tender. Basically, however, the procurement process is well presented.

4.4 Phase 1. Preparation of the tendering process.

4.4.1. Public procurement documents. The following documents for the public procurement administrative file are identified: Technical project, Administrative conditions, Technical conditions, Financial report and Legal report. What are the documents that you must prepare as part of the administrative file for the public procurement? Add the name of documents and explain the content and purpose. (D1.9 Section 4.3. Tender documents file)

Leistungsverzeichnis nach HOAI

4.4.2. Criteria for division in lots. Share your criteria for the division (or not) of a procurement contract in lots. Difference the legal criteria from the criteria you get from experience. (D1.9 Section 4.3.Division in lots)

If it makes sense in terms of money, place and time.

4.4.3. Criteria for the evaluation of the tendering offers.

Share your criteria for the evaluation of the procurement offers in terms of criteria that can be evaluated mathematically by means of a formula (objective), and criteria that can not be evaluated through a formula (subjective). Add the suggested % for scoring (from 0-100%). Complete and edit the following table. (D1.9 Section 4.3.Criteria for NBS evaluation)

Price / Cost	Contracting authorities shall base the award of public contracts on the most economically advantageous tender, understood as lowest price per unit or total costs for implementation. <i>Examples: €/tree. €/m² vertical garden. [Add other examples]</i>	individual
Increase in scope	Increase in the number of units with no additional cost. <i>Examples: plant a higher number of trees, increase km of cycle lane, increase green surface, add more pollinator's modules, increase m² of SUDs.</i>	
Reduce the execution time	The shortening of the project's execution time increases the effectiveness of the implementation. Establish the measure in calendar days or in working days. <i>Examples: Reduction of execution by 10 working days.</i>	
Life cycle analysis	Environmental criteria to the solution with the less life cycle analysis cost. <i>Examples: Distance between the supplier and the final destination.</i>	
	[Please add/delete]	
Scoring (0% - 100%)		

4.5 Phase 2. Tender publication.

4.5.1. Contract notice.

Write the name and web address of the contracting platform where the bidding processes are published in your city and/or country. (D1.9 Section 4.3.Phase 2 Contract notice)

<http://www.vergabe24.de/>

4.6 Phase 3. Evaluation.

Note if the evaluation of proposals in a tendering procedure is through the opening of two envelopes, the administrative and the technical-economic offer. Describe shortly the process in your city/country. (D1.9 Section 4.3.Phase 3 Evaluation)

4.7 Timescale for the Open procedure.

The aim of this diagram is to establish an average duration of the typical tendering process by open procedure, to complete the detailed table in Annex I. Schedule of civil Works procurement by Open procedure (see Annex I for further clarifications).

Create a diagram of the basic phases of the public procurement process of your country/city, as well as include the duration of each period, in legal terms (according to the applicable Public Sector Contracts Law) and in real terms (experience). Include the diagram here or as an attached document. (D1.9 Section 4.4)

How long a contract is awarded depends largely on the size of the order. For small sums, the deadline for submitting offers is 10 days, otherwise it is usually 30 days or more.

It is not possible to give a general estimate of how long the public procurement process will take. There is a special department at the city that only deals with these issues. unfortunately, I can't get an answer here at the moment.

5. Financing nature-based solutions

This section identifies the financial aspects for the implementation of NBS.

5.1 Financial plan: Budget breakdown for the construction of NBS.

Complete the additional expenses to the budget of the technical project that a local administration must take into account when making its financial plan. Among the additional concepts to be considered are: general expenses, industrial profit, taxes, quality control, health and safety coordination, construction management, designer, others. Please, specify the % cost increase of each concept (See section 5.1.1. from the D1.9 Guidelines to tendering process specifications report for more information about this question) (D1.9 Section 5.1)

Answer not possible.

5.2 Funding opportunities.

Complete specific funding opportunities to implement NBS in your city/country. Classify these funds into international funds, national funds, regional or local specific funds. (D1.9 Section 5.2)

Kommunalrichtlinie (national), Klimaschutz Plus (national), Natur- und Umweltschutzprogramm Ludwigsburg (local), KlimOpass (regional).

6. Practical information

This section provides practical information to public bidders from other cities to improve their bidding processes in the implementation of NBS. Share your experience with tips, recommendations, barriers, lessons learnt and questions and answers. Your experience is very welcome.

6.1 Tips and recommendations.

Add some tips and recommendations for the public procurers of other cities in the NBS tendering processes. (D1.9 Section 6.1)

We try to base public procurers services on cradle-to-cradle guidelines. Contractors must declare that they are committed to sustainability criteria in the cradle-to-cradle standard basic.



6.2 Questions and answers.

Add some key questions and answers for the public procurers of other cities in the NBS tendering processes. *(D1.9 Section 6.2)*

6.3 Challenges and barriers.

Describe the challenges and barriers that you face when implementing NBS in your city, and how to overcome them. *(D1.9 Section 6.3)*

6.4 Lessons learnt.

Describe the lessons learnt that you would like to share with other cities to make the implementation of NBS easier. *(D1.9 Section 6.4)*

6.5 Study cases.

You can add study cases that you experienced on the implementation of NBS through public procurement processes. These will serve as experiences for other cities. This section can include specific issues about the legal framework, types of procurement processes, burdens, etc.

Describe any aspects of your city or country that you want to include as a "case study" within the *D1.9 Guideline for tendering processes*, as a particular example, which may be useful for other cities and which have not been collected in any question in this questionnaire. For example, the Soft market testing delivered in Liverpool, etc. *(D1.9 Section 6.5)*

Tendering process specification in the URBAN GreenUP cities¹

Questionnaire.

The aim of this questionnaire is to collect information about the tendering process specifications in the front-runner and follower cities of the URBAN GreenUP project. This information will be used to complete the report D1.9. Guidelines to tendering process specification.

Next to each question is indicated the section of the D1.9 report where the information provided in this questionnaire will be included, which can be used as a reference to better understand the question and its objective.

The questionnaire consists of 27 questions. Feel free to complete each question with the information you consider, using as many bullets, tables, charts and diagrams as possible, and adding more rows if needed.

Thank you in advance for your collaboration! We really appreciate your time!

City Profile Base Data

Stakeholder data.

Name of the City:

Binh Dinh

Country:

Viet Nam

Role (for ex. Municipality department):

Municipality Environment and Climate Unit

Contact email/other:

nguyenvietcuong78@gmail.com

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1. Implementation of the Renaturing Urban Plan (RUP)

The aim of this question is to identify the methods that a local entity may use to develop NBS in its territory.

1.1 Implementing NBS in the city:

(D1.9 Section 2)

What are the different methods that you have to implement NBS in your city?

- ☒ Local authority through public procurement processes
- ☐ Local authority through business as usual activity
- ☒ Private owners/companies
- ☐ Public-private collaboration
- ☐ Other

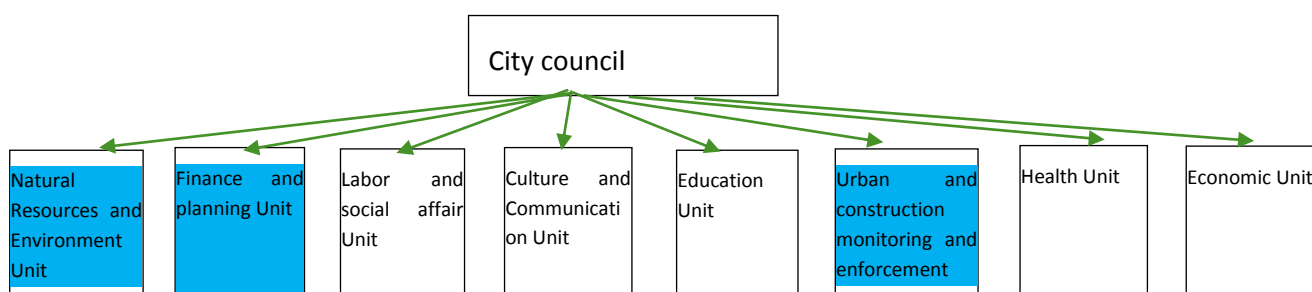
If Other, please, explain. Add some examples for every method.

2. Stakeholders

2.1 Share an organizational chart of your city council, and highlight the areas/department with responsibilities on the implementation of NBS.

(D1.9 Section 2.1)

Insert the organizational chart here (image, chart). Add as many explanations as you want.



The Natural Resources and Environment Unit advise the city council on the management of natural resources, land use, water management, and surveying, Thus it is in charge of the natural quality and living condition in the natural aspect of the city (including the NBS application or guideline for the NBS application in the city environment)

The Finance and Planning unit in charge of the investment planning for overall of the city operation (including the NBS implementation as well)

The Urban and construction monitoring unit is in charge of the construction planning, development of housing, and urban development including the construction material and the sanitation service (water, drainage, park, green space and tree)

2.2 Stakeholders in the execution of civil works in relation with the procurement procedure:

What are the stakeholders of the procurement process in the works contract? *(D1.9 Section 2.1.2)*

- ☒ Government board, responsible for the approval of the tender process and the successful bidder



- ☒ Contract authority, responsible for the administrative management of the contract
- ☐ Recruitment board, responsible for the technical and administrative evaluation
- ☒ Designer, architect/engineer responsible for the technical project signature
- ☐ Contractor, in charge of the contract implementation
- ☒ Works manager, in charge of the general management of the implementation
- ☐ Municipal supervisor, responsible for the administrative supervision and technical advice
- ☐ Other

If other, please complete.

3. Legal framework

(D1.9 Section 3)

Name and describe the main laws regarding the implementation of NBS through public procurement processes, at the supranational (international), national, regional and local levels. Please include a short description and main characteristics. Add as many rows as needed.

We would also like to highlight study cases for the cities (D1.9 Section 3.4). You can include specific study cases, for example, Green procurement law in Italy (MAN).

3.1 Supranational laws.

3.2 National laws.

- Law on State Budget No. 83/2015/QH13: Regulations on the formulation, execution, audit, settlement, and supervision of the state budget; duties and powers of relevant agencies, organizations, units and individuals using the state budget for the implementation of public investment.
- Law on Public Investment No. 39/2019/QH14: Regulates the state management of public investment; management and use of public investment capital; rights, obligations and responsibilities of agencies, units, organizations and individuals related to public investment activities.
- Law on Bidding No. 43/2013/QH13: State management regulations on bidding; Responsibilities of related parties in the procurement activities.

3.3 Regional laws.

3.4 Local laws.

Include also the local urban planning instrument. F.e. *Plan General de Ordenación Urbana 2020. Valladolid.* (D1.9 Section 3.3. and 3.3.1)

General and detail planning for the Quy Nhon urban area stipulating the type of development and construction in specific areas

4. Public procurement procedures

This section identifies the characteristics of the public tendering processes in your country.



4.1 Types of public contracts.

What are the types of public contracts? Add some examples of the implementation of NBS for each type of contract. *(D1.9 Section 4.1)*

Works contract (f.e. construction of a green wall) Examples: construction of NBS (drainage, wetland, green corridor)

Supply contract (f.e. purchase of trees) Examples: Supplying the materials for NBS implementation

Service contract (f.e. Soil permeability tests) Examples: Maintenance of the NBS, green space, park, designing of NBS

☐ Other.

If other, please complete type of contract and add some examples.

4.2 Types of public procurement procedures.

What are the types of public procurement procedures? *(D1.9 Section 4.2)*

☒ Open procedure

☒ Restricted procedure

☒ Negotiated procedure

☐ Negotiated procedure without prior publication

☒ Competitive dialogue

☐ Innovation partnership

☒ Direct procurement (please answer 4.2.1)

☐ Minor contract (please answer 4.2.2)

☒ Project competition

☐ Other

If other, please complete and provide a short description.

4.2.1. Direct procurement. Describe the main characteristics and thresholds.

Direct purchase assets, goods and services to maintain regular operations. Direct procurement contents are specified in Circular No. 58/2016 / TT-BTC dated March 29, 2016 of the Ministry of Finance (direct purchase is allowed for the purchase item lower than value 100 million VND ~ 4,000 €)

4.2.2. Minor contract. Describe the main characteristics and thresholds.**4.2.3. Main procedure for NBS.** According to your experience, please write the main public procedure for the implementation of NBS in your city. For example, open procedure and minor contract.

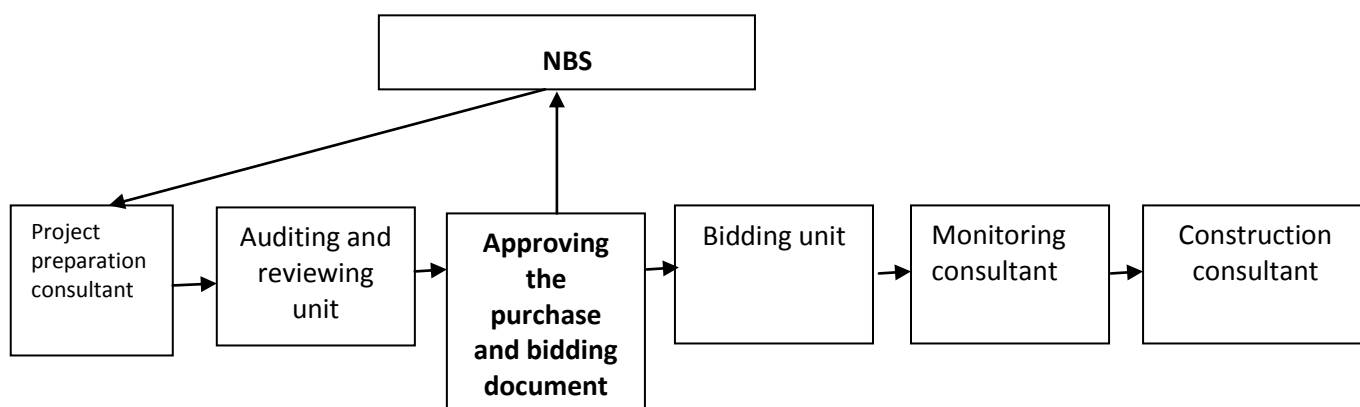
Bidding for the component of construction item and purchase of the material supply. The maintenance work can be through direct procurement



4.3 The public procurement process.

4.3.1. Stages of the public procurement process.

Adapt the following diagram to the stages of the procurement process in your city, by adding/deleting/modifying stages. Add any comment below the diagram, if needed. (D1.9 Section 4.3)



4.3.2. Key stages. Identify what are the key stages and provide the reasons why you answered that. Add as many stages and explanations as you wish. (D1.9 Section 4.3)

Important Select suitable bidders (Evaluation). Because it is difficult to select a suitable consultant with capable technical and financial resources to implement the Project and timely deliver the Project.

4.4 Phase 1. Preparation of the tendering process.

4.4.1. Public procurement documents. The following documents for the public procurement administrative file are identified: Technical project, Administrative conditions, Technical conditions, Financial report and Legal report. What are the documents that you must prepare as part of the administrative file for the public procurement? Add the name of documents and explain the content and purpose. (D1.9 Section 4.3. Tender documents file)

Administrative conditions are prepared by the public office.

The technical and financial reports are prepared by consultant hired to prepare the project.

4.4.2. Criteria for division in lots. Share your criteria for the division (or not) of a procurement contract in lots. Difference the legal criteria from the criteria you get from experience. (D1.9 Section 4.3.Division in lots)

Depend on the technical design and the cap of the purchase amount stipulate by different law of purchasing using public investment.

4.4.3. Criteria for the evaluation of the tendering offers.

Share your criteria for the evaluation of the procurement offers in terms of criteria that can be evaluated mathematically by means of a formula (objective), and criteria that cannot be evaluated through a formula (subjective). Add the suggested % for scoring (from 0-100%). Complete and edit the following table. (D1.9 Section 4.3.Criteria for NBS evaluation)

This is depend on the type of the project (but it is mainly depend on offering prices, and the technical detail of the proposal)

The reduce execution time or life cycle analysis is included in the technical proposal for the implementation.

Price / Cost	Contracting authorities shall base the award of public contracts on the most economically advantageous tender, understood as lowest price per unit or total costs for implementation. <i>Examples: €/tree. €/m² vertical garden. [Add other examples]</i>	50
Increase in scope	Increase in the number of units with no additional cost. <i>Examples: plant a higher number of trees, increase km of cycle lane, increase green surface, add more pollinator's modules, increase m² of SUDs.</i>	20
Reduce the execution time	The shortening of the project's execution time increases the effectiveness of the implementation. Establish the measure in calendar days or in working days. <i>Examples: Reduction of execution by 10 working days.</i>	20 (included in the technical quality)
Life cycle analysis	Environmental criteria to the solution with the less life cycle analysis cost. <i>Examples: Distance between the supplier and the final destination.</i>	10 (included in the technical quality)
Scoring (0% - 100%)		100%

4.5 Phase 2. Tender publication.

4.5.1. Contract notice.

Write the name and web address of the contracting platform where the bidding processes are published in your city and/or country. (D1.9 Section 4.3.Phase 2 Contract notice)

Public investment will be published on the bidding portal <http://muasamcong.mpi.gov.vn/>

4.6 Phase 3. Evaluation.

Note if the evaluation of proposals in a tendering procedure is through the opening of two envelopes, the administrative and the technical-economic offer. Describe shortly the process in your city/country. (D1.9 Section 4.3.Phase 3 Evaluation)



Bid Evaluation Process: Technical Proposal Evaluation> Financial Proposal Evaluation> Contract Negotiation> Contract Completion and Signing.

The technical proposal is evaluated according to the criteria of the technical proposal and select the suitable bidders to open the financial proposal, the proposal with combined score higher will be selected for the contract award.

4.7 Timescale for the Open procedure.

The aim of this diagram is to establish an average duration of the typical tendering process by open procedure, to complete the detailed table in Annex I. Schedule of civil Works procurement by Open procedure (see Annex I for further clarifications).

Create a diagram of the basic phases of the public procurement process of your country/city, as well as include the duration of each period, in legal terms (according to the applicable Public Sector Contracts Law) and in real terms (experience). Include the diagram here or as an attached document. (D1.9 Section 4.4)

Normally it takes 45 days.

5. Financing nature-based solutions

This section identifies the financial aspects for the implementation of NBS.

5.1 Financial plan: Budget breakdown for the construction of NBS.

Complete the additional expenses to the budget of the technical project that a local administration must take into account when making its financial plan. Among the additional concepts to be considered are: general expenses, industrial profit, taxes, quality control, health and safety coordination, construction management, designer, others. Please, specify the % cost increase of each concept (See section 5.1.1. from the D1.9 Guidelines to tendering process specifications report for more information about this question) (D1.9 Section 5.1)

Depending on the type of work, or the scale of the construction or purchase of the equipment related to the implementation of NBS (cost of construction – equipment), there will be a cost percentage as prescribed. There has not been a general guideline on the percentage for each activity in the construction and equipment purchase for NBS.

5.2 Funding opportunities.

Complete specific funding opportunities to implement NBS in your city/country. Classify these funds into international funds, national funds, regional or local specific funds. (D1.9 Section 5.2)

In implementing NBS, there are specific budget for the maintenance of the urban infrastructure, maintenance of the green space, park.

There are also national fund to support for city through the budget allocation through provincial authority and provincial authority will re-allocate to different cities according to the needs.

There is also funding from private or developer (but mostly related with developing new residential areas, or development of new public mall, market that can including some part of NBS element but have to have good coordination with the urban planning and monitoring).



6. Practical information

This section provides practical information to public bidders from other cities to improve their bidding processes in the implementation of NBS. Share your experience with tips, recommendations, barriers, lessons learnt and questions and answers. Your experience is very welcome.

6.1 Tips and recommendations.

Add some tips and recommendations for the public procurers of other cities in the NBS tendering processes. *(D1.9 Section 6.1)*

The tendering or bidder can inquire through the public bidding portal and through communication with the environment and planning units of the city council.

6.2 Questions and answers.

Add some key questions and answers for the public procurers of other cities in the NBS tendering processes. *(D1.9 Section 6.2)*

Key questions:

Q: In the public investment purchase, which guideline has to be complied, and guideline for NBS in the tendering process (NBS is consider service or construction contract or service contract)?

Q: The implementation of the contract? Through framework agreement and contract or direct purchase?

6.3 Challenges and barriers.

Describe the challenges and barriers that you face when implementing NBS in your city, and how to overcome them. *(D1.9 Section 6.3)*

- Technical guideline for the NBS design, development, implementation.
- The financial investment, the calculation of the IRR (rate of return of the investment), and pricing of different solutions.

6.4 Lessons learnt.

Describe the lessons learnt that you would like to share with other cities to make the implementation of NBS easier. *(D1.9 Section 6.4)*

Lessons learned by the city in making the implementation of the NBS easier, possibly the lessons learned is through "Strengthening and promoting the integration of NBS into local urban plans and investment plans to mitigate adverse impacts of environment and climate change".

6.5 Study cases.

You can add study cases that you experienced on the implementation of NBS through public procurement processes. These will serve as experiences for other cities. This section can include specific issues about the legal framework, types of procurement processes, burdens, etc.

Describe any aspects of your city or country that you want to include as a "case study" within the *D1.9 Guideline for tendering processes*, as a particular example, which may be useful for other cities and



which have not been collected in any question in this questionnaire. For example, the Soft market testing delivered in Liverpool, etc. *(D1.9 Section 6.5)*

