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HOMBRE

"Holistic Management of Brownfield Regeneration"

D 7.4: Business Plan

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Lead Author	Katja Wendler (DECHEMA e.V.)
Contributors	
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Summary

Several tools and concepts have been developed in HOMBRE that support land managers or site owners to manage their site well, i.e. prevent the emergence of brownfields e.g. by monitoring some site relevant early warning indicators or accelerate the transition of a brownfield into a new use.

The tools and concepts together with the knowledge of the experts that worked in HOMBRE and that could continue their collaboration in a "HOMBRE+ network" make sure that site owners find a beneficial solution for their brownfield.

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1 Scope and frame of the deliverable

This report provides a framework and describes the steps and the procedure how the work of the HOMBRE+ expert network that makes use of the HOMBRE tools and concepts could be organised.

2 Business Plan for the HOMBRE+-Network

1. Company Description

1.1 Description of HOMBRE+ Network

The HOMBRE+ network is a loose and voluntary network of experts from different disciplines related to land use management and especially (sustainable) brownfield management and regeneration.

The HOMBRE+ network aims to help end users that are willing to set approaches to prevent brownfields from emerging and help them develop beneficial and sustainable solutions for the re-use of existing brownfields always trying to minimise the costs and maximise the benefits from the (re-)use of brownfields.

The work of the HOMBRE+ network is supported by a range of products such as concepts, tools and training materials that were developed in the EU FP7 project "HOMBRE - **Ho**listic management of **B**rownfield **Re**generation" (see chapter 3).

1.2 History of HOMBRE+ Network

The experts that form the **HOMBRE+ network** are mainly partners of the EU FP7 project "HOMBRE – Holistic Management of Brownfield Regeneration" (project no. 265097) executed between December 2010 and November 2014. The HOMBRE+ experts are very experienced as they have been working in the field of brownfield regeneration and land use management for years.

The objectives of the HOMBRE EU FP7 project were to develop innovative approaches to prevent sites from becoming brownfields or limit their existence and come to a beneficial regeneration of existing brownfields in order to tackle urban sprawl and ensure a more sustainable built environment.

HOMBRE has developed a new perspective and approach to Holistic Management of Brownfield Redevelopment and land management in general, the "Zero brownfield framework" (please see chapter 2). During the project duration, the HOMBRE project partners have developed a range of **products** such as decision support tools, models and guidance material that support the end users in each phase of the land use cycle (see chapter 2.2).

These products could be used by

- 1. the end user as an initial support to develop and choose optimal and sustainable solutions for managing brownfields in his land;
- 2. the end user as an initial support combined with additional help from the HOMBRE+ experts to develop and choose optimal and sustainable solutions for managing brownfields in his land;
- 3. the HOMBRE+ experts themselves to support the end user to find optimal and sustainable solution(s) in managing brownfield.

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¹ www.zerobrownfields.eu and bfn.deltares.nl (Website of Brownfield Navigator)



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1.3 Current Status

The Brownfield Navigator as one of the main products and outcomes of HOMBRE is a mapbased online instrument. Most of the different products developed in HOMBRE (for more details on the products please see chapter 3) are integrated in the Brownfield Navigator (BFN), but some can as well be used and applied by the end users as separate products.

The optimization of the products and especially the testing of the feasibility of all tools integrated in the BFN has been done based on the involvement of stakeholders at several European case studies that are part of the HOMBRE project.

The experts of the HOMBRE+ network are proposing to carry on contributing to the elaboration of the products and to keep each partner part of HOMBRE+ informed on the progress of the individual products, along with their features.

1.4 Future Plans

After the end of the HOMBRE project on 30th November 2014 e.g. the BFN as a comprehensive decision support tool will be available online as a web-based instrument. In order to get acquainted with the approach and tools, to make optimal use of the products and tools contained in the BFN and thus to come to most beneficial solutions the support from the experts of the HOMBRE+ network is recommended.

The most attractive feature of the HOMBRE+ network is that they can advise together (as a group of partners or individually) end users that need help in finding out which data and information is required to optimally evaluate the current situation of their site/area, the possible future use and which benefits could be gained.

As mentioned the HOMBRE+ network will support the end user in solving his specific (brownfield) challenge, while making use of the HOMBRE approach, products and outputs.

2. Mission & Vision

2.1 Mission Statement

The main mission of the HOMBRE+ network is to support end users to come to appropriate solution(s) for brownfield management and land management in general.

Whether it is by getting guidance from the BFN or by getting advice from HOMBRE+ partners involved in a support exercise, HOMBRE + will aim at the following:

- Focus on delivering value in projects by designing specific project services and benefits, thus creating new opportunities for brownfield regeneration.
- Enhance project value by seeking synergies in project services, e.g. by the application of integrated regeneration processes (i.e. technology trains) and sound land use planning.
- Offer innovative scenarios and solutions to the end users to show alternative options (e.g. with the examples of successful brownfield regenerations presented in the "Example library" of the BFN)
- Advise the end users on what needs to be considered in order not to miss important steps
- Do research and further develop state of the art technologies for brownfield regeneration



The vision of the HOMBRE+ network and the products developed in HOMBRE is the ambition to create a paradigm shift towards 'Zero Brownfields'. The idea behind the "zero brownfield" framework is, not only, to avoid underused, wasted land, but also to promote full consideration of sustainability aspects in decision making within brownfield regeneration projects.

All land in a built up area should contribute to sustainable urban development. When a land use ceases to be beneficial to society, land management should facilitate the transition towards another sustainable use.

Land use, especially in urban areas, is dynamic: cities need to adapt to changing societal needs and opportunities (for jobs, health, living standards, logistics, etc.) as well as building in resilience to environmental stresses caused by climate change. HOMBRE realised from the outset that one of the keys to improve brownfield redevelopment is a better understanding of the life cycle of urban land use and of the specific role brownfields - their emergence, persistence, and redevelopment - has within this cycle. Brownfields emerge when a given land use, for example an factory or business estate that provided a large number of jobs, turns from being highly beneficial to society to having a marginal or even detrimental effect or simply comes to an end. As such, brownfields are a symptom of changing times. While the presence of brownfields provides the necessary "free" space for new developments within the urban environment - to meet evolving societal demands brownfields often persist for longer than desirable. The customary view is that a negative legacy of the former use, such as local unemployment or contamination, poses too costly a barrier to overcome. HOMBRE argues that a clearer vision on what the brownfield site has to offer in responding to current and emerging societal challenges would help overcome such barriers.

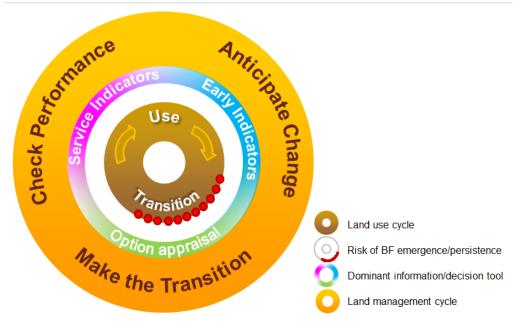


Figure 1: The HOMBRE Zero Brownfield framework: administrative land management cycle (outer cycle) addressing land use transitions in the land use cycle (inner cycle).

The red dots indicate where in the cycle brownfields may potentially emerge. The duration of subsequent use phases may vary from less than a year to various decades.

The dynamics of urban land use are cyclical: site developments are planned, realised and then utilised and maintained until the development is decommissioned or simply abandoned, after which a new cycle for site re-development starts. The land use cycle comprises periods of beneficial use alternated with periods of transition. To prevent brownfields from emerging,

or accelerating their regeneration once they have formed, a long term -perpetual-administrative management perspective is required.

Brownfields are periods of wasteful unfulfilled potential. The paradigm shift presented by HOMBRE+ is that land use and land management each have their own tempo and do not and need not - necessarily run at the same pace. The land management considered is that which is within the remit of administrative authorities or other agencies that have long term (multi-cycle) responsibility for sustainable land use within an area or portfolio of sites. Ensuring brownfield redevelopment obviously is about transitions in land use, but it should not be limited in time to these periods only. Therefore, the management phase of "Making the Transition" is preceded by "Anticipating Change", and followed by "Checking Performance". Together, these phases provide management continuity throughout the life cycle of urban land use and should shorten the time land lies idle or underused.

3. Product & Service Description

3.1 Overview of HOMBRE+ Products & Services

Table 1: Overview of HOMBRE products

HOMBRE tool/product	Contact institution
Brownfield Navigator	Deltares, The Netherlands
Brownfield Opportunity Matrix	r3 environmental, UK
Brownfield Remit /Response (BR2)Tool	University of Nottingham, UK
Anticipating BrOWnfield Emergence Tool (BOWET)	BRGM, France
E-learning Materials on the Brownfield Navigator	DECHEMA e.V., Germany
Early Warning indicators	Deltares, The Netherlands
Service Indicators	Deltares, The Netherlands
Technology Trains	University of Wageningen, The Netherlands
Zero Brownfields Framework	Deltares, The Netherlands

The **Brownfield Navigator (BFN)** as one of the main products and outcomes of HOMBRE is a modular online instrument that combines a decision support framework with a geographical information system (GIS). It aims to help end users to navigate towards successful brownfield regeneration by providing a tool for visualisation and by guiding the user through the brownfield regeneration process within the different land management phases. It can be used for land use planning at different scales (regional/area planning, managing a portfolio of sites, or project/site planning): to determine if any locations are at stake of becoming a brownfield, and at site level: to assist the regeneration of the brownfield.

The BFN is divided in modules, following the management phases of the HOMBRE Zero Brownfield Framework (figure 1): 1) Anticipate change; 2) Make the transition 3) Check performance. In each module different steps are defined. In each step, several items are given, advising or providing guidance and / or tools.

The BFN contains the concepts developed in the different work packages of the HOMBRE project. It offers many different possibilities of use, e.g. as a "basic tool" it might act as a starting point for spin off research projects of the different HOMBRE+ network experts or it could be used by end users themselves in order to support them to find solutions to their site specific problem.

The BFN window (figure 3) shows the different items available within each step for brownfield regeneration (including the GIS functionality). Each step provides different items that support the user within the step. It is possible to use the BFN on a design table (Figure 2) or via a normal desktop or laptop.



Figure 2: Example of an interactive design table

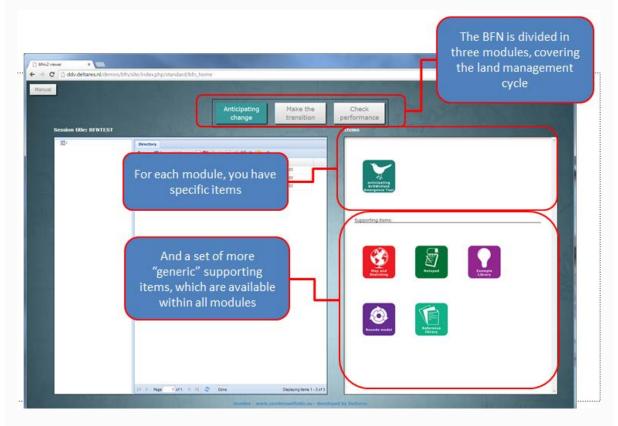


Figure 3: Modules and items of the BFN

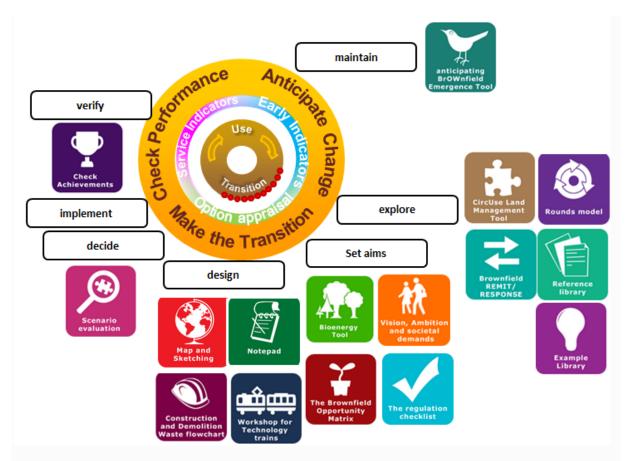


Figure 4: Overview of the tools of the BFN and their relation to the different phases of the Zero Brownfields Framework.

The following **tools** and products are integrated in the BFN but could also be used as separate tools to support and ease the work of e.g. land managers:

Brownfield Opportunity Matrix	r3 environmental, UK
Brownfield Remit /Response (BR2)Tool	University of Nottingham, UK
Anticipating BrOWnfield Emergence Tool	BRGM, France
(BOWET)	
Early Warning indicators	Deltares, The Netherlands
Service Indicators	Deltares, The Netherlands
Technology Trains	University of Wageningen, The
	Netherlands

The **Brownfield Opportunity Matrix** is a simple Excel based screening tool to help decision makers identify what services they can get from soft reuse² interventions for their site, how these interact and what the initial default design considerations might be. The matrix essentially maps the services that might add value to a redevelopment project against the interventions that can deliver those services, as shown in broad terms in Table 2.

 $^{^{\}rm 2}$ i.e. uses where the soil is not sealed by buildings or other infrastructure

Table 2: Main services and interventions within the Brownfield Opportunity Matrix

Services	Interventions
O Soil Improvement	O Soil Management
○ Water Resource Improvement	O Water Management
O Provision of Green Infrastructure	O Implementing Green Infrastructure
O Risk Mitigation of Contaminated Soil and Groundwater	Gentle Remediation Options
O Mitigation of Human Induced Climate Change	Other Remediation Options
(global warming)	Renewables (energy, materials, biomass)
O Socio-Economic Benefits	 Sustainable Land Planning and Development

The matrix identifies where there are strong synergies between interventions and services, and also the relatively infrequent occurrences of antagonism. Wherever a particular intervention delivers a service, this interaction creates an opportunity to add value. The matrix describes the kinds of value that each opportunity might generate.

The types of value generated by soft re-use considered are:

- Revenue Generation Opportunity
- Natural Capital: developed in a number of ways, including (but not limited to) providing green infrastructure, improvement of the local climate, improvement of water resources and mitigation of contamination (protecting and enhancing local ecosystem/environment).
- Cultural Capital: developed by improving the social environment (by improving the aesthetics of an area and/or creating a sense of place/belonging for e.g.) and can be a direct result of an increase in natural capital.
- Economic Capital tangibles: e.g. increase of land and property values in the area (feeding back into Cultural Capital) providing benefits to the local community and also the investor.
- Economic Capital intangibles: benefits that are immeasurable but can include for example, an improvement of the image of the investor (be it a company or individual).

The **Brownfield REMIT/RESPONSE (BR2) tool** is a systems based analysis tool which allows a deeper understanding of an urban system and supports the comparison of the impacts and weaknesses of different redevelopment options for a site.

The interacting network of population, environment, economy and regulation in an urban area constitutes a complex system. When deciding between potential future uses for a site, particularly a long-term brownfield site, it is important to consider, not just each potential use in isolation but also the site's place within the wider urban system and whether that new use would work with or against that system.

The BR2 technique utilises a matrix-based systems analysis approach which a cross-section of stakeholders populate and analyse in order to compare potential re-use scenarios, assessing how each would interact with the prevailing urban system: identifying likely problem areas and bottlenecks affecting the ultimate success of the project, and whether the project itself fits within the system or is disconnected from it.

The **Anticipating BrOWnfield Emergence Tool (BOWET)** proposes a four steps approach to identify the potential of brownfield emergence in various districts of a study area. Steps to be followed are:

- 1. Define the spatial limits of the study area and urban units within and procure relevant base maps
- 2. Select the most relevant early warning indicators for the study area
- 3. Gather spatially differentiated data for the chosen indicators and evaluate the potential for brownfield emergence for each urban unit
- 4. Compare results to maps of existing brownfields to generate general predictive models for brownfield emergence and consult local experts to discuss the validity of the results

As results thematic visualisations and maps are generated that are helpful to initiate a dialog process with stakeholders.

The **Early Warning Indicators** are tool to apply the HOMBRE Zero Brownfield framework in practice. Those in charge need adequate information that enables them to prepare for upcoming changes and look ahead for potential solutions and synergies. The urban management level that HOMBRE had in mind primarily, when developing its framework, is that of municipalities responsible for local development and spatial planning. However, private developers or public agencies that own or manage a portfolio of sites could also benefit

A list of around 40 "Early Warning Indicators" was developed as a starting point for early warning monitoring. Changes in these indicators can signal if a management intervention in the land use cycle is required to either prevent a brownfield from being created in the near future or to take early action for a well-managed transition of land use. The indicators are grouped into subcategories within the main dimensions of sustainable development: economy, society and environment.

The monitoring of **Service Indicators** can provide relevant management information, for example the time it takes to fully realise the various benefits envisaged of the new land use, the effect of external drivers on if and how fast the targets are reached, and not least if at some point the benefits of the new land use are at risk of falling below the required limits and additional effort or action is needed to safeguard the contribution of the project to sustainable urban development. The set of Service Indicators may shrink with time, as some may become irrelevant when targets are reached or no further change is anticipated. In the longer term, project based Service Indicator monitoring can be integrated into the more general Early Warning Indicator monitoring, providing information on when – not if – a new Zero Brownfield land management intervention may be called for.

The **Technology Train** concept aims to define the playing field in which technological solutions needs to be found to enable the brownfield sites redevelopment in an economic, ecological and socially acceptable way. As at each brownfield site the obstacles and boundary conditions are different, it is unrealistic to formulate a complete list of technologies that can potentially be applied in the redevelopment of brownfield sites. Therefore a framework is developed to define the playing field within which technologies have to operate. This framework seeks to effectively use resources that are present at the brownfield to fulfil demands on goods and services that are needed in the redeveloped site.

The **HOMBRE+ network** is a loose and voluntary network of very experienced experts from different disciplines related to land use management and especially (sustainable) brownfield management and regeneration.

The HOMBRE+ network aims to help and support end users that would like to prevent brownfields from emerging or develop optimal solutions for the re-use of their existing brownfields (always trying to minimise the costs and maximise the benefits from the (re-)use of brownfields). The work of the HOMBRE+ experts might be supported by the use of the BFN or other products developed within the HOMBRE project.

The group of HOMBRE+ experts that supports the end users to solve his specific challenge and/or to make the best use of the HOMBRE products is composed differently for each problem case depending on which specific experts qualities are required.

Usually the country where the HOMBRE partner resides and maintains contacts with end users he will be the point of contact in that country. In order to collect information on EU scale and evaluate the result of the project it is advised to inform Deltares on the spin-off of the HOMBRE project. Deltares can be contacted to give feedback on team composition that deals with the external request for assistance.



Different kinds of **training** will be offered (mainly by the HOMBRE+ network):

- The HOMBRE+ network with its experts from different disciplines offers knowledge support to consultants (being "consultants' consultant") e.g. by European training/qualification on brownfield regeneration based on the overall concept and guidance for land (including -potential- brownfields) management developed in HOMBRE, maybe in combination with the BFN.
- Consultancy services could be offered. For example proposal support could be an option, or assisting consultants or other service providers in applying the before mentioned guidance and tools, developing tailored made services
- Online training can be offered by the set of e-learning modules, which are selfexplaining presentations on the use of the BFN, its different steps and its possibilities/potentials; however, personal contact and approaches are advised.
- General training can be given on the job or parallel to symposia to introduce to the BFN and the whole "Zero Brownfield" framework.

The overall "Zero Brownfield" framework and guidance for land (including -potentialbrownfields) management is a **concept** that supports the end user to come to a beneficial land /brownfield management approach.

3.2 Product & Service Advantages

The service of the HOMBRE+ network is flexible (experts are chosen by the end user according to the knowledge needed to solve the specific problem).

The advantages of the **BFN** are the following:

- It is online and thus easily accessible
- Is has a modular set up wich can be added to / changed
- After the web based tool has been developed, protected, tested and approved for release the tool can be so far obtained at no costs (as it is open source/freely available)
- Visualization and thus eases the stakeholder communication and planning of (re-) use.
- Many different kind of information can be brought together at one location
- Already existing data can be imported into the system
- Integration of existing features (e.g. in the BFN) that have not yet been combined before.

The advantages of the **Brownfield Opportunity Matrix** are the following:

- Support initial identification or benchmarking of soft reuse options for brownfields at
- Support exploratory discussions with interested stakeholders
- Provide a structure to describe an initial design concept, in support for example of planning applications
- Provide a structure for more detailed sustainability assessment of different re-use combinations, and similarly for cost benefit comparisons.

The advantage of the **Anticipating BrOWnfield Emergence Tool (BOWET)** is the following:

• The tool fosters the early identification of potential brownfield emergence

The advantages of the **Early Warning Indicators** are the following:

- They provide an objective basis to become aware of changes
- The Early Warning Indicator can also serve in a first step to spatially single out those urban areas that are particularly in need of monitoring or preventive actions.





The advantage of the **Service Indicators** is the following:

• The Service Indicators allow visualise performance and benefits of efforts, especially to public and financial stakeholders

The advantage of the **Technology Trains** is the following:

 Technology trains draw on knowledge and techniques from different fields to overcome environmental and resource challenges in brownfield redevelopment by systematically assessing resource and service supply and demand of the redevelopment site and its vicinity.

In general the **concepts and models** offer the following advantages:

- The main advantage of the "Zero Brownfield" framework is that management phases and goals are made explicit, which is always the first step if you want to improve things. Having a clear conceptual framework is also beneficial for communication between stakeholders and end users. So the guidance on the "Zero Brownfield" framework will offer information in a structured way.
- A specific advantage of the "Zero Brownfield" framework is the long term perpetual-perspective, as this is a prerequisite for enhancing sustainable development.

3.3 Product Development Activities

The BFN as well as all other products (such as decision support tools, models and training material) are being developed within the EU FP7 project HOMBRE between December 2010 and November 2014. All steps and tools implemented in the BFN were tested and checked for their feasibility and applicability with the stakeholders and case studies that are part of the HOMBRE project.

The service of the HOMBRE+ network will always benefit from the increasing knowledge and experience of the experts that are part of it and that will support the end users with the application of the BFN and the other HOMBRE products.

The liability of the **HOMBRE+ network**'s consultancy will be laid down in the case by case contract that will be signed between the HOMBRE+ network and the case owner. One member of the HOMBRE+ network will always act as main contact.

4. Target Market

4.1 Market Characterisation

For the products **tools**, **guidance**, **training and consultancy** and the supporting services offered by the **HOMBRE+ network** potential end users would be:

- Municipalities/local authorities (*main end user group*), regulators and other bodies concerned with brownfields on a regional scale that aim e.g. to minimise maintenance costs and that want a strategic approach to managing their urban land;
- (Larger) landowners (private and public) interested in productive interim uses of brownfield land
- Brownfield managers, who want to make a proper management and maintenance of their brownfield regeneration process. They have an extended knowledge about brownfield regeneration and will work in the way they always do. However, new concepts and ideas might be welcome by them.
- (Environmental) consultants (or developers) who want to advice the case owner on actions and (brownfield regeneration) projects and want to use e.g. the BFN to support their projects in visualisation.



- Urban planners, urban architects, local/regional development agencies, other local agencies (environment, energy, homes etc.), land planning authorities looking for a differentiated, innovative and holistic approach to address land use (i.e. multifunctionality), land recycling and brownfield regeneration.
- Construction, building and real estate developing sector

4.2 Market Trends & Growth Patterns

Due to the demographic development there will be at least some countries with a shrinking population and an industry that turns in many EU countries from manufacturing industry to a service industry. Thus there might be more potential brownfields in the future that need solutions.

Identifying potential brownfields (due to application of "early indicators") in an early stage, looking for potential re-use options and making use of potential synergies by integrating and applying "technology trains" (= specific technology combinations to come to a more timely, more sustainable and thus optimized regeneration of brownfields) and keeping in mind possible future services offered by the area helps to save money for the authorities. This is always welcome as the authorities most times face a lack of money.

The market for the HOMBRE products is likely to grow as projects become more complex and the need for resource efficiency and sustainable development grows.

In the future there might be more (online) tools (as well more freeware) for brownfield and land management available on the market. The availability of more data will ensure more competition from other parties. In case the HOMBRE+ network and tools can collect experience and increase its application in many countries the BFN and HOMBRE products should be able to take a leading role.

For urban area (considered as target market) in general, trends may go towards more multifunctional urban areas, capable of more autonomy in energy, food and other services and sectors (leisure, biodiversity, waste recycling and valorisation, water management, climate change adaptation and mitigation). In this perspective, the provision of services and benefits from brownfield is an opportunity to contribute to the sustainable and "autonomous" cities of tomorrow.

4.3 Market Size and Potential

In 2011-12, the European Soil Data Centre of the European Commission conducted a project to collect data on contaminated sites from national institutions in Europe using the European Environment Information and Observation Network for soil (EIONET-SOIL). According to the received data, the number of estimated potential contaminated sites is more than 2.5 million and the identified contaminated sites around 342 thousand. Municipal and industrial wastes contribute most to soil contamination (38%), followed by the industrial/commercial sector (34%). Mineral oil and heavy metals are the main contaminants contributing around 60% to soil contamination. In terms of budget, the management of contaminated sites is estimated to cost around 6 billion Euros (€) annually.³ Even so this study is mainly related to contaminated sites which is only one segment in brownfield management, it gives a good estimate of the size of the market.

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³ Contaminated Sites in Europe: Review of the Current Situation Based on Data Collected through a European Network: http://www.hindawi.com/journals/jeph/2013/158764/

5. Industry and Competitive Analysis

5.1 Industry and Competitive Overview

For the **concepts** (e.g. "Zero Brownfield" framework) that are more about the planning/management process than about technological solutions competitors are expected to be more in the non-technical fields, like urban or organisational planners/managers.

For the services offered by the **HOMBRE+ network** all advisors/consultants and the existing service provider community involved by brownfield regeneration are competitors. Many tools are available that might compete e.g. with the **BFN** as one of the main tools of HOMBRE. By offering a freely accessible hub with the HOMBRE products and information, the HOMBRE+ network might stand out of the crowd and attract interested case owners. Add the experience in a data base the tool becomes a source of information that increases in attractiveness.

5.2 Competitive Advantages

The HOMBRE+ network has the following competitive advantages:

- Software (BFN) is freely available only costs for services provided by HOMBRE+ experts have to be covered.
- Experts from the HOMBRE+ network are being chosen specifically for each project (according to their experience and knowledge required in the project)
- HOMBRE+ can profit from the large range of experiences gained in HOMBRE's different WPs that are all being integrated in the BFN and also available from the people of the HOMBRE+ network (that were part of the HOMBRE project)

5.3 Barriers to Entry

- One of the barriers to overcome both by the HOMBRE+ network and the HOMBRE products is how to get in touch with potential end users.
- Some potential end users might be conservative in the way they do their work and might not be open to try the new approaches offered by HOMBRE+.
- Some potential end users might be open to the new approaches of HOMBRE+ but might not have the time to get familiar with the way the HOMBRE products work or might not have the financial resources to ask for support from the HOMBRE+ network experts.
- An additional obstacle might be that no time for further development/support of the use of the BFN is available after November 2014 (due to resources that are only provided within the FP7 project duration) in case bugs are found during application after the end of the HOMBRE project.



6. Marketing Plan

6.1 Marketing Strategies and Marketing Tactics

During the project duration of HOMBRE (= until end of November 2014) potential end users were informed on the benefits and potential of the HOMBRE products and the services offered by the HOMBRE+ network:

- During community related events
- Through personal contact and the network of the HOMBRE consortium
- Flyer/information in the HOMBRE newsletter that is distributed to 1.800 persons/readers

Especially personal contact and maybe workshops with potentially interested end users could help to spread knowledge the HOMBRE products and the service offered by the HOMBRE+ network.

It is important to get an idea of how end users work and what their certain needs are in order to make the HOMBRE products and the services of the HOMBRE+ network fit perfectly to their needs.

The following marketing strategy is foreseen:

- Make HOMBRE concept and outcomes visible in key events and platforms (CL:AIRE, national brownfield networks, development agencies, urban development networks and platforms ...)
- The ideas of the "zero brownfield" framework will be integrated in and distributed with the Brownfield Navigator. In addition workshops could be held in which sites or regions are analysed along the lines of the "zero brownfield" framework, but where tools are being used that the end user already is used to (instead of the BFN).
- Training, guidance, consultancy based on the "zero brownfield" framework could be offered.
- Training for the BFN could be offered for free and then be used to find out what is a specific need for case owners (spin off projects).
- An advisory guide could be distributed for improving the grade of recycling building materials and decreasing the generation of waste.
- Short "training-awareness raising" sessions could be held for specific clients in order to make them aware of the concepts and models that serve as guiding principles and framework to elaborate preliminary project design.
- Translate ideas from preliminary project design into a set of feasible regeneration options, balanced against each other. Way of selling: Consultancy services (on guidance and tools how to translate ideas from preliminary project design into a set of feasible regeneration options, balanced against each other) could be offered to site developers and/or local development agencies seeking provision of innovative and sustainable solutions in brownfield regeneration

6.2 Public Relations

For public relations the following chanals are foreseen up to now:

- HOMBRE Website
- Information at events of the community (presentation, sessions,...)
- Flyer
- Personal contacts



7. Operations Plan

7.1 Location; Property Ownership/Lease Terms

The BFN is being developed by Deltares. The BFN is freely available online in the internet. The HOMBRE+ network and the support of the cases with the use and application of the BFN are implemented by Deltares, Utrecht, The Netherlands.

Deltares will be the main coordinator for the HOMBRE+ network. Specific project teams out of the network will be put together based on the individual requirements.

The consortium of the HOMBRE project will primarily form the pool for the HOMBRE+ network.

7.2 Operations Process (incl. Organizational Chart)

The operational procedure within the HOMBRE+-Network is foreseen as follows:

- 1. End user has a problem/case/potential or existing brownfield
- 2. End user gets aware of the tools, concepts and models and the support/training/(consulting) service offered by the HOMBRE+ network
- 3. End user gets in contact (email/phone) with a HOMBRE+ expert who will inform Deltares.
- 4. Deltares will manage the team building process. Alternatively it can be deligated to the local partner of the HOMBRE+ network
- 5. First meeting (physical) of end user and HOMBRE+ expert and provision & exchange of data to obtain an idea what needs to be done and which expert knowledge is needed.
- 6. Exchange ideas of HOMBRE+ experts and Deltares; Deltares could suggest the members that need to be involved of the HOMBRE+ network; choice of experts
- 7. Support of the person responsible for the case to look for the right data and find solutions for his specific challenge

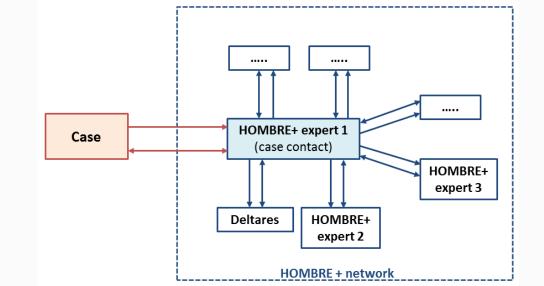


Figure 5: Organizational Chart for a project process

8. Management Team

The management board of the HOMBRE Project is proposed as the initial HOMBRE+ management team.



