CEN

**CWA 16833** 

WORKSHOP

December 2014

# **AGREEMENT**

ICS 13.080.01; 01.040.13; 13.030.99

English version

# Glossary of Terms for Holistic Management of Brownfield Regeneration (GoT-HOMBRE)

This CEN Workshop Agreement has been drafted and approved by a Workshop of representatives of interested parties, the constitution of which is indicated in the foreword of this Workshop Agreement.

The formal process followed by the Workshop in the development of this Workshop Agreement has been endorsed by the National Members of CEN but neither the National Members of CEN nor the CEN-CENELEC Management Centre can be held accountable for the technical content of this CEN Workshop Agreement or possible conflicts with standards or legislation.

This CEN Workshop Agreement can in no way be held as being an official standard developed by CEN and its Members.

This CEN Workshop Agreement is publicly available as a reference document from the CEN Members National Standard Bodies.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Cc	ontents	Page
For	eword	3
Intr	oduction	5
1	Scope	7
2	Normative references	7
3	Terms and Definitions	7
Bib	liography	15
	Contist of October 19 and October 19	
2		

# **Foreword**

This CEN Workshop Agreement has been drafted and approved by a Workshop of representatives of interested parties on 2014-11-10, the constitution of which was supported by CEN following the public call for participation made on 2013-05-02.

A list of the individuals and organizations which supported the technical consensus represented by the CEN Workshop Agreement is available to purchasers from the CEN-CENELEC Management Centre. These organizations were drawn from the following economic sectors: chemical industry, environmental technology and research institutes, construction, public authorities and academia.

The formal process followed by the Workshop in the development of the CEN Workshop Agreement has been endorsed by the National Members of CEN but neither the National Members of CEN nor the CEN-CENELEC Management Centre can be held accountable for the technical content of the CEN Workshop Agreement or possible conflict with standards or legislation. This CEN Workshop Agreement can in no way be held as being an official standard developed by CEN and its members.

The final review/endorsement round for this CWA was started on 2014-09-08 and was successfully closed on 2014-11-10. The final text of this CWA was submitted to CEN for publication on 2014-11-26.

This CEN Workshop Agreement is publicly available as a reference document from the National Members of The following countries: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Comments or suggestions from the users of the CEN Workshop Agreement are welcome and should be addressed to the CEN-CENELEC Management Centre.

This CEN Workshop has mainly been proposed by the HOMBRE consortium, which is conducting a Collaborative Project on the Holistic Management of Brownfield Regeneration. HOMBRE is supported under the 7<sup>th</sup> Framework Programme of the EU, Theme FP7 ENV.2010.3.1.5-2, Environmental technologies for brownfield regeneration.

The CEN Workshop members who have supported the document are:

ACCIONA Infraestructuras, C.P. 28108 Alcobendas (Madrid), Spain

DECHEMA Gesellschaft für Chemische Technik und Biotechnologie e.V., 60486 Frankfurt am Main, Germany

Deltares, 3584 CB Utrecht, The Netherlands

French Ministry of Ecology, Sustainable Development and Energy (represented by BRGM, 45060 Orléans, France)

Helmholtz Centre for Environmental Research – UFZ, 04318 Leipzig, Germany

Projektgruppe Stadt + Entwicklung, 04229 Leipzig, Germany

r3 environmental technology ltd., Reading RG4 8NN, UK

Tecnalia, 48160 Derio, Spain

## CWA 16833:2014 (E)

The Land Trust, Birchwood WA3 7GB, UK

University of Nottingham, Nottingham NG7 2TU, UK

University of Rome "Tor Vergata", 00133 Rome, Italy

Verband der Chemischen Industrie, 60329 Frankfurt am Main, Germany

hemis

The Institute for the Control of the Control VITO Flemish Institute for Technological Research, 2400 Mol, Belgium

# Introduction

This CEN Workshop 74 has elaborated a voluntary agreement on a glossary of terms related to all phases of circular land management, especially the holistic management of brownfield regeneration. The stakeholders involved in holistic management of brownfield regeneration come from various disciplines with very different backgrounds. Thus there is a need for mutual understanding to overcome barriers for communicating and implementing the holistic management of brownfield regeneration strategy, as end-users are being faced with different terms from different projects.

Starting point for the frame and background for the glossary was the concept of "circular land use management" (please see Figure 1), an integrative, strategic and governance approach aiming to primarily and systematically seek to exploit the potential to develop existing building sites, activate previously developed building land and thus reuse derelict land. It was developed between 2004 and 2007 within the research group "Fläche im Kreis" in order to support the land usage goals (reduction of the current land utilization to 30 ha/d in 2020; increase of internal development compared to external development) formulated amongst others in the German "Strategy for Sustainable Development".

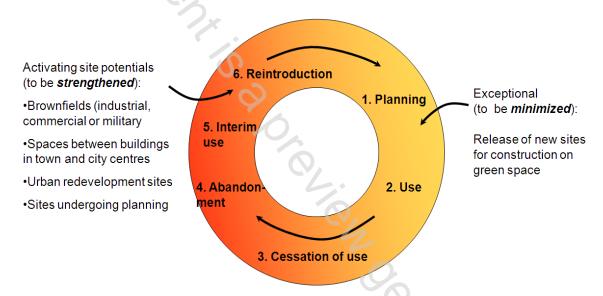


Figure 1 – Circular land use management: Model of phases and potentials (modified from German Institute of Urban Affairs – Difu, Research Group "Fläche im Kreis", 2005)

Analysing the cycle of Figure 1 in some detail, shows that it is comprised of various "sub cycles" and perspectives. At the base of it all, from a site occupational perspective, is the *land use* cycle. In its simplest form this consists of only two phases: a *Use phase* and a *Transition phase* (Figure 2). At the end of the *Use phase*, the current land use stops.

<sup>2</sup> http://www.difu.de/projekte/2004/flaeche-im-kreis-kreislaufwirtschaft-in-der-staedtischen.html

<sup>1</sup> http://edoc.difu.de/edoc.php?id=8K2TRD63

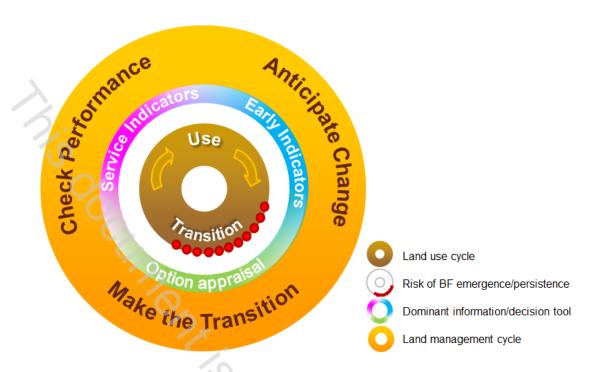


Figure 2 – Administrative land management cycle (outer donut), providing land management continuity throughout the land use cycle (inner donut).

The land use cycle consists of two phases: Use and Transition. 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 management cycle distinguishes three main phases: anticipating change, making the transition and checking performance. Management focus is on facilitating smooth land use transitions when needed, thereby avoiding unnecessary emergence of BFs. Management phases and use of tools within one cycle may overlap in time. More than one management cycle may run at the same time, where the parallel cycles differ in spatial or temporal focus. Hence the land management cycle is decoupled from the physical land use cycle.

To prevent brownfields from emerging, or accelerating their regeneration once they have formed, a long term -perpetual- administrative management perspective is required. This type of management should not only cover the high-brownfield-risk phase. It should already start during the use phase, when changes in the benefits of the current land use and actual demand for services can be anticipated (Figure 2). Planning a well-managed transition can then be taken up in an early stage. Similarly, a forward looking perspective should be used in the management and monitoring of the sustainability of the services provided by the new use, to prevent that its benefits will be too short-lived.

These two cycles of land use and land management/monitoring comprise the backbone for the "zero brownfield" perspective for holistic land and brownfield management. The idea and vision of this perspective is not only to avoid underused, wasted land, but also to promote full consideration of sustainability aspects in decision making within brownfield regeneration projects. For this, both the sustainability of techniques and methodologies used in the generation process, as well as the sustainability of the resulting land use should be assessed. Hence the focus is on strategies, technologies and solutions for brownfield regeneration and management, that emphasize the positive value of available resources and potential social, economic and environmental benefits.

CWA 16833:2014 (E)

# 1 Scope

This CEN Workshop Agreement provides terms and definitions that could be used for the communication and discussion of issues related to holistic management of brownfield regeneration and land management/land use planning in general.

#### 2 Normative references

The following references, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the cited edition applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

Not applicable.

#### 3 Terms and Definitions

For the purposes of this document, the following terms and definitions apply.

## 3.1

#### artificial soil

soils composed of excavated soil material, dredged materials, manufactured soils and treated soils and fill materials

Note 1 to entry: If the artificial soil is supposed to perform specific functions, nutrients or other additives may be added, if necessary.

[SOURCE: prEN ISO 11074:2013, 2.2.1]

#### 3.2

#### brownfield

site that has been affected by former uses of the site or surrounding land, is derelict or underused, mainly in fully or partly developed urban areas, require intervention to bring it back to beneficial use; and may have real or perceived contamination problems

[SOURCE: CABERNET, Concerted Action on Brownfield and Economic Regeneration Network]

#### 3.3

#### circular land management

process of handling developed land, from the viewpoint of a continuous land use cycle that is aimed at facilitating smooth land use transition, thereby preventing unnecessary brownfield emergence

Note 1 to entry: Also the different management phases interlink in a continuous management cycle that does not just cover the transition phase itself, but already starts during the use phase, when changes in the benefits of the current land use and actual demand for services can be anticipated. Planning a well-managed transition can then be taken up in an early stage. Similarly, a forward looking perspective is used in the management and monitoring of the sustainability of the services provided by the new use, to prevent that its benefits will be too short-lived.

## 3.4

#### contaminated land

land, including soil and/or groundwater beneath the surface containing substances (trace elements, specific element species, organic compounds, gases, nutrients) at concentrations that would not normally be present

Note 1 to entry: The presence of these substances at elevated concentration may or may not be harmful, however, contaminated land is most often used to describe land where there is at least a suspicion that the contaminant situation endangers water resources, ecosystems and/or human health.

Note 2 to entry: Individual countries may have specific legal definitions of contaminated land.