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Brownfield regeneration plays a key role in sustainable land use management. Currently, many useful and innovative remediation technologies as well as methods to support risk assessment and decision making processes for an optimized brownfields' regeneration have been developed, but they are only rarely applied using their full potential. Identified obstacles for an effective regeneration are:

- I. the abundance of strategies, tools, documented case studies and re-mediation technologies available at the EU level
- II. the difficulties in adapting them to cultural, regional and site-specific requirements.

## project background

The main objective of the 7th Framework Programme project timbre (Tailored Improvement of Brownfield Regeneration in Europe) is to overcome these barriers by providing brownfields' owners, local authorities and stakeholders with a web-based problem- and target-oriented customizable decision support toolbox. The activities of timbre are divided into eight closely interrelated work packages (WP). This contribution focuses on the activities developed so far in WP1.

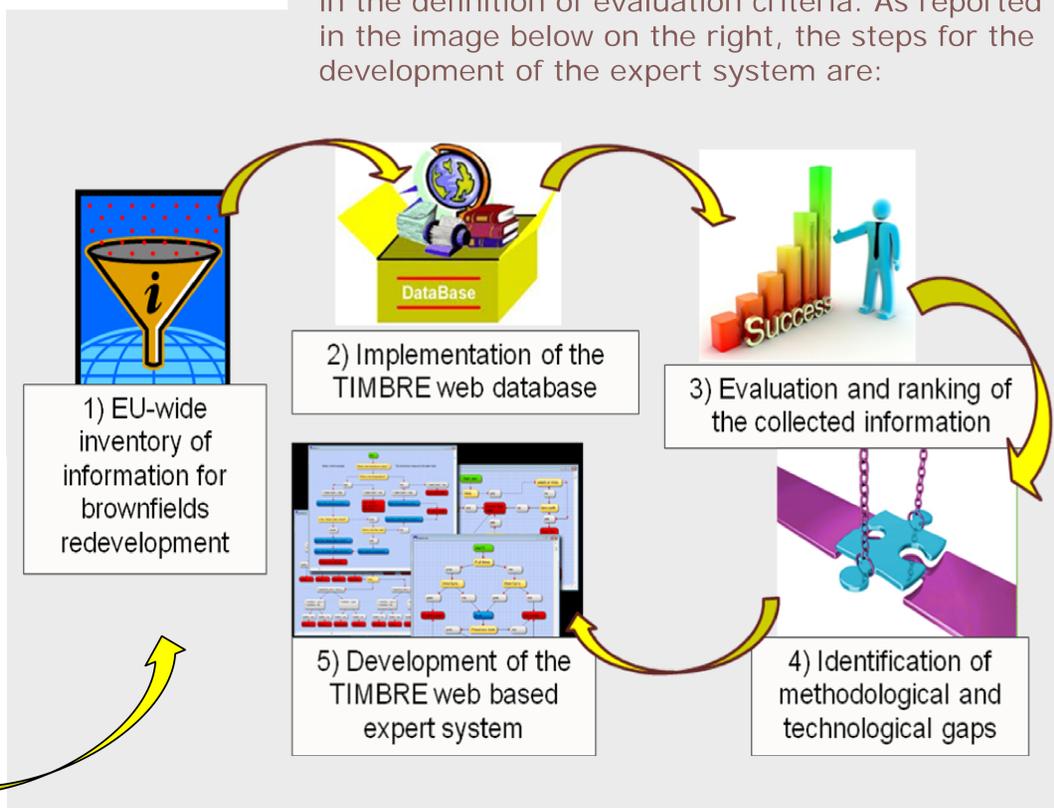
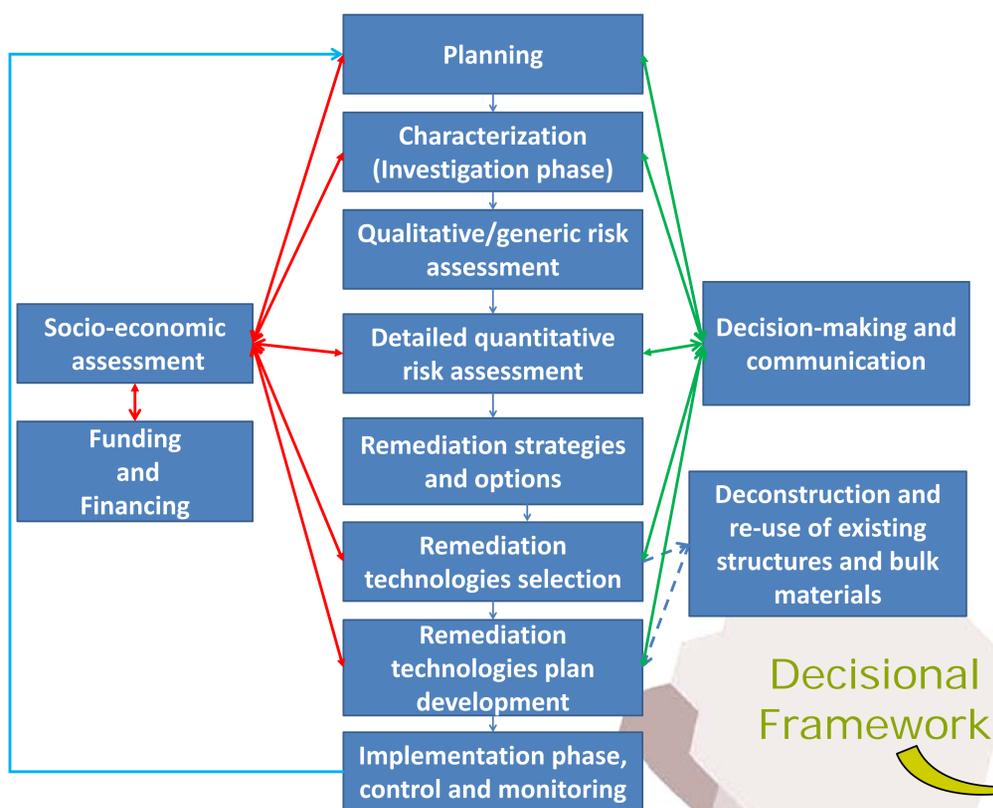
## Work Package 1 Objective

WP1 main objective is the development of an **expert system** for the *collection, analysis* and *classification* of available data and information on previous projects, programs, and other activities focused on the regeneration of brownfields in order to enhance brownfield Regeneration processes. The information analysis and classification will be performed by means of suitable criteria in order to generate a ranking which will identify the most suitable and useful information according to the point of view of the timbre case-studies stakeholders.

## Expert System

The collected information will be *classified, ranked* and *evaluated* in the different phases of the brownfield regeneration processes. To this end a **decisional framework** has been developed, and the different **phases** of the brownfield remediation process have been identified. Involved stakeholders will be asked to evaluate the proposed framework in order to achieve an agreed and useful scheme that will be the basis of the TIMBRE expert system.

The expert system will allow easy accesses and an intuitive interface to collect information for **all end-users**. This approach involves local experts, site owners, public authorities and engineering companies in the definition of evaluation criteria. As reported in the image below on the right, the steps for the development of the expert system are:



Disclaimer and acknowledgement:

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Learn more about timbre and the expert system on [www.timbre-project.eu](http://www.timbre-project.eu) or contact by email: [timbre-info@ufz.de](mailto:timbre-info@ufz.de)

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