

Explanation of concepts and terms used in the application process

Due diligence

Refers to the detailed measures undertaken by the coordinating partner to ensure that a dam removal project or preparatory work for a dam removal has been suitably prepared and is viable. Measures should be proportionate to the size and complexity of the project and include at least the following: a) engagement with local communities to ensure that there is acceptance for the removal and no known reasons for any resistance that may disrupt the removal b) engagement with all relevant local administration/s to secure their approval and support for the removal e.g. issuing permits c) exploration of any legal obstacles which may prevent a removal d) all relevant feasibility work to ensure that the removal can be completed safely, effectively and as per agreed budget e) evidence that a strong project team is in place that will effectively deliver the project project/s.

Europe

We refer to Europe using the geographic definition which stretches as far as the Ural River and the Caspian Sea in the east and the Greater Caucasus Range and the Black Sea, with its outlets, the Bosphorus, and Dardanelles, in the south. Based on that division, parts of Azerbaijan, Georgia, Turkey, Kazakhstan, and Russia are included.

Feasibility studies

The collection of data to enable the full viability of a dam removal proposal to be assessed. The outcome of feasibility studies supported by the programme should be a strong likelihood of a dam being ready for demolition. Examples of feasibility studies include:

- **Ecological:** assessment of species (e.g. diadromous, endangered) and habitats (e.g. wetlands) that might benefit from dam removal; collation of management plans for ecological management of watershed; assessment of presence / absence of invasive species; review of ecological sensitivity (ecological resilience and the ability for species and ecosystems to recover) following removal.
- **Environmental:** collection of data e.g. water samples to assess temperature, chemistry; assessment of sediment quality (e.g. contaminants) and quantity; magnitude and frequency of river flow to assess flood risks.
- **Geographical/locational:** nearby infrastructure/properties/utilities
- **Political:** anything not covered within grant area A4 – securing permissions and permits
- **Legal:** who owns the dam; are they willing to sell/have their dam removed; liability issues from removal; water rights in place; are permits required to remove the dam?
- **Economic:** cost benefit analysis for local economy; consideration of costs and source of funds for subsequent stages of work.
- **Social:** stakeholder engagement including consultation with local communities; public health and safety issues; consideration of aesthetic/sentimental value.
- **Historical:** consultation on historical / archaeological issues of note.

An outcome of the feasibility stage could be that a removal project is not viable, but most projects should aim to mitigate any potential negative impacts with careful planning.

Financing from other sources

The programme strongly encourages proposals that demonstrate the existence of co-financing or the ability to leverage additional funds e.g. feasibility studies funded by the programme that enables a third party (any other funder) to support dam removal.

Kilometres of river 'opened up'

This refers to the distance between the proposed small dam removal project and the distances upstream and downstream to the next barrier. This may also be referred to as linear connected area or functional length. To calculate the distance, all barriers must be considered. This could include other man-made barriers such as fish passes and also natural barriers e.g. a waterfall.

Long term sustainability

In the context of this programme, a dam removal should result in opening up the stretch of river permanently. Project proposals that demonstrate measures that will guarantee long-term sustainability will be strongly favoured e.g. legal protections for rivers to remain open, and rivers protected from any new developments within a local management plan.

Outcomes

Outcomes differ from outputs. We refer to outcomes as the consequence of a small dam being moved. Examples could include:

Ecological

- Change in sediment load.
- Increased abundance of migratory fish (good indicator of river quality).
- Increase in diversity and abundance of riparian species.
- Increase in the abundance of keystone species.
- Ecosystems restored (potential to use aerial photos to review riverine and riparian habitats).
- Ecological status (according to WFD indicators) improved.

Social/economic

- Positive impacts on the surrounding economy
- Positive impacts on surrounding communities

Enabling

- Impact of the programme on catalysing the wider movement.
- Impact of the programme on enabling others to obtain funding for dam removal.
- National policies developed or improved to support dam removal.

Risks

Risks are present before, during and after a dam removal project and can usually be categorised as ecological, environmental, economic, infrastructural, social, political, legal, or financial. We refer to risks as the future uncertainty relating to a) a dam removal project coming to fruition e.g. high likelihood of local opposition which prevents a permit from being issued, b) the dam removal taking place as planned, e.g. delays in demolition, costs end up being double the forecast c) unintended outcomes e.g. flood downstream, coordinating partner sued for damages. All risks need to be carefully considered and mitigation strategies proposed.

Significance for the ecological restoration of the river and/or adjacent ecosystems

Dam removals will be considered significant for the ecological restoration of the river if they open up large areas of previously fragmented river and/or contribute positively to the programme's targets by:

- Increasing the diversity and abundance of riparian species;
- Increasing the abundance of migratory fish;
- Restoring previously damaged ecosystems;
- Improving the ecological status of a river (as categorised under the Water Framework Directive).

The location of a dam within the river basin and its location with respect to other dams in the river basin will also affect the significance of the removal for the ecological restoration of the river.

Support from the local community

Given the important role that rivers play for everyone living adjacent to them, it is vital that there is broad community support in place for the dam removal and that efforts have been undertaken to identify and test the levels of support. Local community involvement is essential from a project's inception and throughout the removal process and any concerns that may jeopardise the dam removal and the opening up of the river should be alleviated. The local community could include the dam owner, local residents, government, environmental regulatory agencies, water companies, NGOs, farmers, other landowners, and private companies. Those involved in the removal process can include policymakers, government advisors, scientists, NGOs, funders, consulting companies and citizen groups.

Support from the local administration

This is an essential part of any dam removal project, and all relevant institutions should be identified and approached. Permits issued by a local authority are usually required for dam removal. The permitting process often significantly guides the procedures that can be implemented during removal. For example, regulations may specify whether or not heavy equipment can be operated in the river channel.