

# AMBER

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## D5.2 Knowledge Translation Strategy

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Authors: World Fish Migration Foundation and the AMBER consortium.

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## Executive Summary

This document presents the project’s “Knowledge Translation Strategy, defining the strategy and implementation measures to efficiently communicate in order to ensure the best exploitation of its results, as part of Work Package 5 – “Dissemination”.

This Knowledge Translation Strategy consists of two parts:

- A framework of Communication activities, strategies and tools
- The Knowledge Translation Strategy with their corresponding charts of activities and their expected impact exemplified in Key Performance Indicators (KPIs).

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## 1 INTRODUCTION

Nearly all major European rivers are heavily fragmented. Stream fragmentation remains one of the main reasons for having failed to meet WFD targets, whilst hydropower is expected to increase which may further increase river fragmentation. Stream connectivity is poorly defined and criteria for restoration are often arbitrary and taxon-specific. There is no global overview of stream barriers in Europe, but there are many more barriers than it is possible to mitigate for. In addition, the available information on stream barriers is fragmentary, uses different data standards, is based on different criteria, and is largely inaccessible to the majority of stakeholders. Lastly, existing tools for barrier impact assessment and prioritisation tend to be heavily biased towards migratory fish.

The AMBER project will be of interest to a large and diverse target audience. The target audience includes amongst others: NGOs, Fisheries and environmental groups, Catchment-based community groups, Water Authorities, Angling associations, Wildlife trusts, Government agencies and Strategic groups tasked with national WFD coordination.

## 2 KNOWLEDGE TRANSLATION STRATEGY

### 2.1 Aim of Communication activities

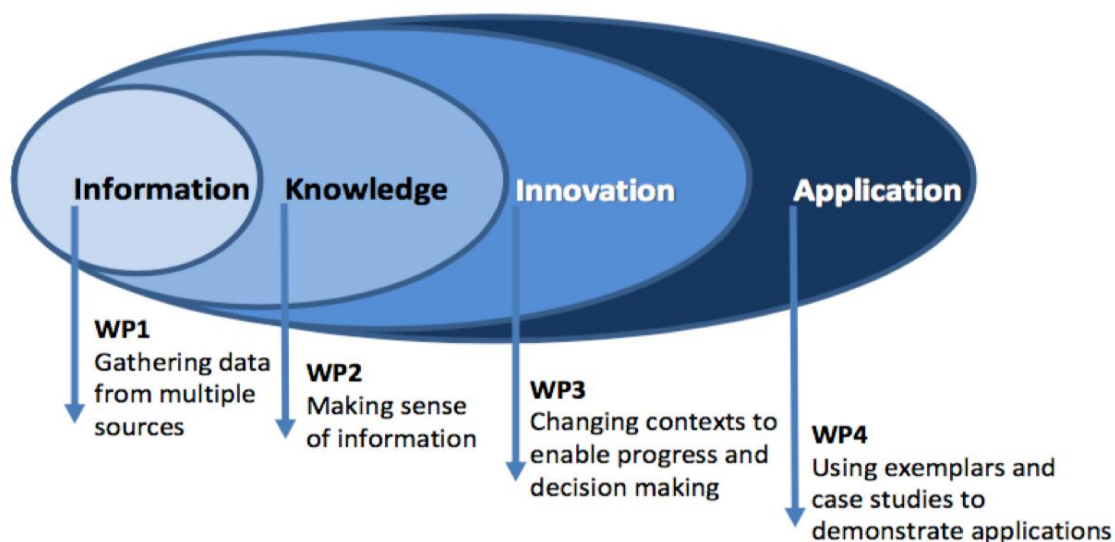
The AMBER Knowledge Translation strategy targets the four strategically important EU priorities:

1. **Growth.** Barriers affect both wildlife and people including those involved with fisheries, sport fishing, tourism, agriculture and hydropower. Many stakeholders depend on water abstraction, but also on the availability of free flowing waters, for their jobs, energy and even food supply. Effective water use is also linked to Good agricultural and environmental conditions (GAEC), a requirement under the EU Common Agricultural Policy (CAP). Due to different interests (e.g. human consumption, irrigation, fisheries, tourism, hydropower) each target audience requires a different communication approach, although they all require objective, specific and reliable information to direct them towards more effective barrier management. Through its dedicated knowledge translation strategy, AMBER will deliver the information necessary to support an effective use of stream barriers in Europe, as well as setting an example globally.
2. **Conservation of Biodiversity.** AMBER is closely aligned with the EU 2020 Biodiversity Strategy (including Natura 2000 zones). It will have beneficial effects on the restoration of freshwater flora and fauna and will serve to protect global biodiversity in running waters by decreasing river fragmentation, promoting habitat connectivity, and evaluating the merits of different restoration actions through several quantified targets including:
  - contributing to the target of 100% improvement in the conservation status of freshwater species under the Habitat Directive, and 50% improvement in the status of some riverine species listed under the Bird Directive
  - establishing green infrastructures for the maintenance and enhancement of freshwater ecosystems and their services, and making a significant contribution to the restoration of at least 15% of degraded fluvial systems
  - contributing to a measurable improvement in the conservation status of aquatic species and stream habitats affected by agriculture and forestry
  - generating beneficial effects on the population size and age distribution of protected and umbrella species through better management (e.g. reduced impact of barriers on migratory fishes)

3. **Transnational Cooperation.** The 2013 EU Strategy on green infrastructures, that aims to make greater use of wetlands and other natural areas across Europe to reduce flood risk and result in cleaner water will be targeted by showcasing what Europe can achieve in terms of international strategic collaboration. This will be done by working together with partners from 11 different European countries to create tools, reports and products together and sharing them with the appropriate stakeholders. By organizing events that are being held in several countries and connected by the newest digital channels we also overcome the innovation divide between regions.
4. **Public involvement and Education.** The knowledge translation strategy is made in a way that both experts and the public work together to provide information and create educational materials. The barrier atlas will provide a very clear result of public involvement and practical use for both educational and scientific purposes.

## 2.2 Knowledge Translation

To create Europe-wide awareness and implement the knowledge translation strategy, good internal communication is needed: we need to clarify the message and spread the results and outcomes together. As shown in the figure below, information gathered in WP1 will be used to create knowledge in WP2. This knowledge will in turn be used to build three decision support tools to help with adaptive barrier management in Europe’s rivers. These decision support tools will be tested in case studies performed under WP4. All products resulting from the knowledge translation are described in the Plan on Exploitation and Dissemination of Results. To ensure that information from each of these work packages is communicated and disseminated in an effective and appealing manner to the appropriate target audiences we have developed the “Let it Flow” campaign.



**Figure 1.** The importance of good internal communication and structure to create an effective translation from information to application.

## 2.3 Let it flow

The external communication is based on the “Let it flow” campaign, which will create a consistent tone and visual standard for communication. This standard will apply across social media, hash tags, presentations, video, dissemination material, and all external verbal and visual communications. The

communication campaign will connect with the target audience and inspire action, participation and innovation.

AMBER is a brand that needs to be introduced, but to make it obvious and appealing to specialists and non-specialists alike the “Let it Flow” slogan will be used since it is immediately understood by stakeholders (unlike AMBER) . “Let it Flow” not only refers to a desire to increase connectivity through better barrier management, but also to the flow of information, energy, resources, capital and knowledge that creates a vibrant economy within ecologically sustainable environments. Communication of AMBER will regularly include the “Let it Flow” theme (e.g. slogan in combination with logo) or social posts with #letitflow. The Let it Flow theme will always be combined with the AMBER logo and/or textual explanation and the required EU flag image and wording.

The campaign has four phases:

1. **Build brand awareness** for AMBER by communicating all content in a relevant, simple and visually appealing way by using the let it flow theme and creating a community of interested people and organisations around the AMBER project with both online and offline communication tools, as shown in Figure 2.



Figure 2. Poster and Rollup banner for AMBER

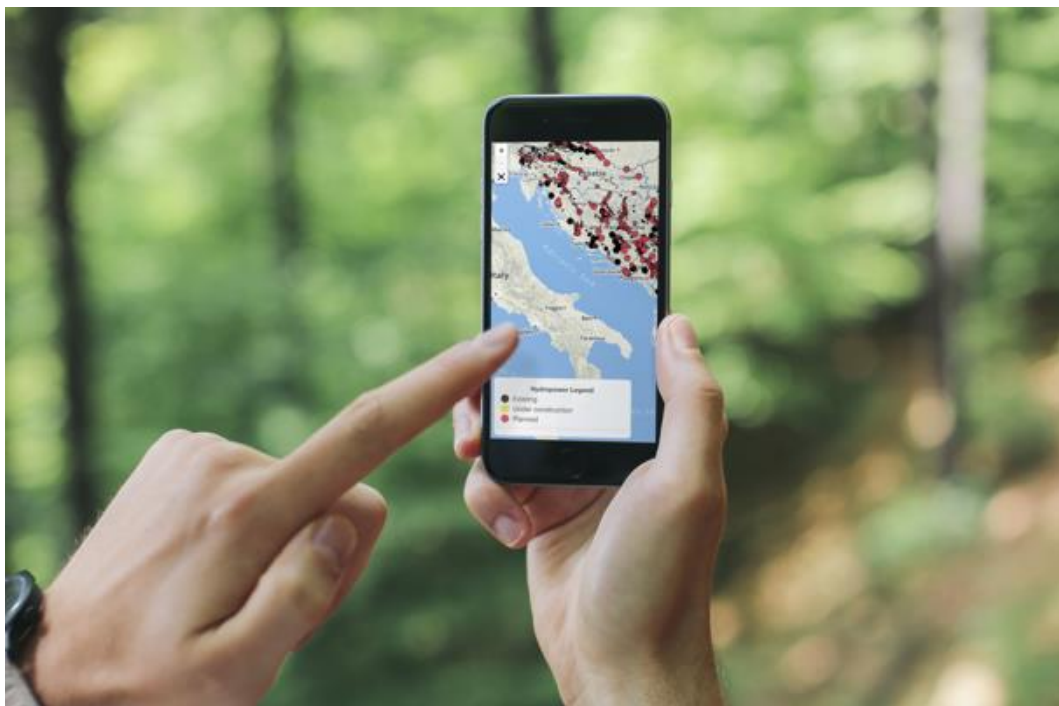
2. **Sharing knowledge**, spreading news, and sharing content; to keep fans, partners and a target audience aware of the developments, goals and progress of AMBER. The knowledge (or

products), news and content used for communication are defined in the Communication Chart (Table 1). An example of such a product is the flyer (Figure 3, below).



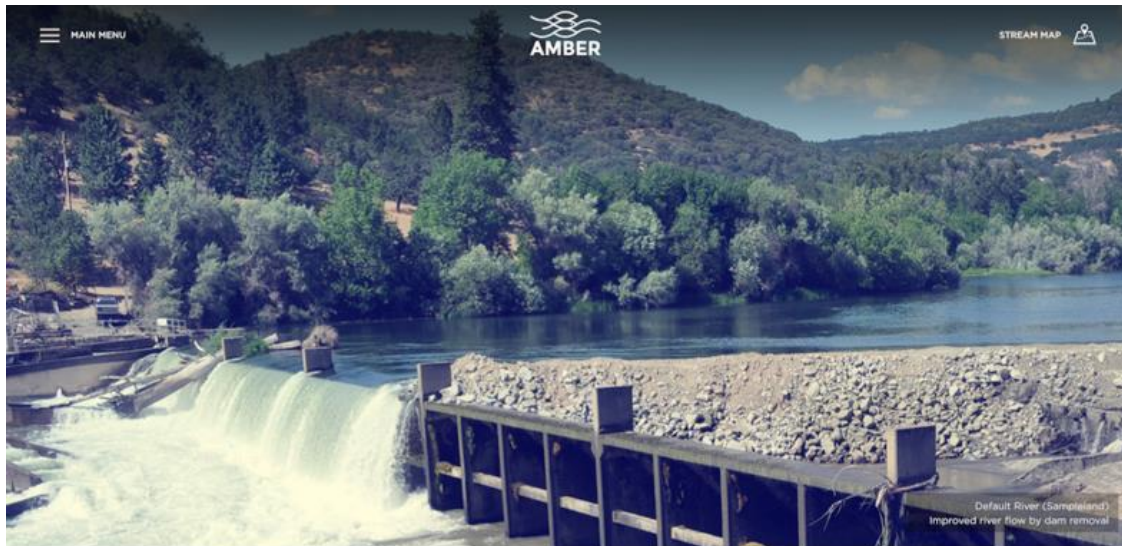
**Figure 3.** The relevant, easy to understand and visually appealing flyer to share knowledge and inform people about AMBER

3. **Recruitment**, mostly directed at citizen science, where communication is based on motivating the public through many different channels and activities to utilise the smartphone app (Figure 4) and access the barrier atlas.



**Figure 4.** Smartphone app for citizen science

4. **Sharing results** of the AMBER project with easy to understand content. The knowledge (or products), news and content used for communication are described in the Plan for the Exploitation and Dissemination of Results (D5.6). This will be done using many different channels, for instance the website as shown in the Figure 5 (below).



Amber aims reconnect Europe's rivers, the smart way. We use adaptive river management, environmental DNA and the power of citizen science to improve stream connectivity.

- European rivers
- What is eDNA
- Amber Mission



**Figure 5.** Sharing results by using the website

The Knowledge Translation Strategy is aimed at providing S.M.A.R.T. objectives (Specific, Measurable, Agreed, Realistic and Timely). Therefore the actions and their respective tools, channels, timing, and target audience have been listed in the communication chart below (Table 1).



## 2.4 Communication Chart

**Table 1.** AMBER Communication Chart

WP	Output	Dissemination Tool	Dissemination Channel	Time	Target Audience
1	Guidance on stream barrier surveying and reporting	Project report (D1.1)	Website, Newsletter, social media, Workshops, Presentations & Print	M6	Regional, national & international
	JRC Science for Policy Report: Country-specific reports containing the metadata - JRC Science for Policy Report	Policy Briefing (D5.9)	Website, Newsletter, social media, Workshops, Presentations & Print	M12	National (for each Member State)
	Barrier Inventory & Atlas: Web Portal with interface for data input by the public with INSPIRE-compliant harmonised database and metadata	Barrier Atlas (D1.3)	Website, Newsletter, social media, Workshops & Presentations	M36	Local, regional, & national
	Peer-reviewed Publication on development of the Barrier Inventory and online Atlas	Peer-reviewed Publications (D5.3)	Website, Newsletter, social media, Workshops, Presentations & Print	M48	regional, national & international
	Peer-reviewed Publication on extent of river fragmentation in Europe			M48	regional, national & international
2	Report on the molecular toolkit: taxon-specific sets of primers, protocols and pipelines	Project reports (D2.5, D2.1, D2.2, D2.4, D2.7)	Website, Newsletter, social media, Workshops, Presentations & Print	M12	regional, national & international
	Classification map of running waters considering fish community structure and barrier impacts			M18	regional, national & international
	Conceptual model of ecological impacts of barriers in EU considering habitat selection criteria for running Waters			M24	regional, national & international
	Rapid habitat assessment methodology supported by remote sensing			M24	regional, national & international
	Overview of river ESS demand and delivery in selected case studies under different scenarios of climate change and barrier management			M34	regional, national & international
	Digital river infrastructure assessment and classification software tool (passability and hydropower potential)			Decision Support Tool (D2.3, D2.6)	Website, Newsletter, social media, Workshops & Presentations
	Simulation and modelling methodology with indicators ('habitat stress days') for management scenario comparisons	M32	regional & national		

WP	Output	Dissemination Tool	Dissemination Channel	Time	Target Audience
	Impact of stream barriers on ecosystem services and benefits of restoring connectivity	Policy Briefing (D5.9)	Website, Newsletter, social media, Workshops, Presentations & Print	M48	Local, regional, national & international
	Conceptual framework for estimating barrier effects on fluvial processes,	Peer-reviewed Publication (D5.3)	Website, Newsletter, social media, Workshops, Presentations & Print	M48	regional, national & international
	Conceptual framework for estimating Barrier effects for a range of aquatic biota			M48	regional, national & international
3	Impediments to barrier planning and stakeholder conflict resolution	Project report (D3.6, D3.1, D3.2, D3.5, D3.3)	Website, Newsletter, social media, Workshops, Presentations & Print	M24	Regional & national
	Response by a range of aquatic organisms to hydrodynamic conditions commonly created at river infrastructures			M30	Regional & national
	Quantification of economic costs and benefits of river infrastructures (evaluation of natural capital)			M30	Regional & national
	Report on results of questionnaire to model social attitudes to dams and reservoirs			M30	Local, regional & national,
	Inventory of barriers and river infrastructures at test catchment with demonstration of Integrated Agent Based Dispersal Model			M36	regional, national & international
	River infrastructure planning (removal, mitigation and installation) decision support tool	Decision Support Tool (D3.4)	Website, Newsletter, social media, Workshops & Presentations	M36	regional, national & international
	Peer-reviewed Publication on application of the AMBER decision support tool for barrier mitigation and planning	Peer-reviewed Publication (D5.3)	Website, Newsletter, social media, Workshops, Presentations & Print	M48	regional, national & international
	Peer-reviewed Publication on Socio-economic drivers and impediments for successful reconnecting of rivers			M48	regional, national & international
4	Review and meta-analysis of benefits, challenges, and trade-offs in adaptive barrier management	Project report (D4.1, D4.3)	Website, Newsletter, social media, Workshops, Presentations & Print	M18	regional, national & international
	EU Salmon Atlas			M44	regional, national & international
	Policy briefing on adaptive barrier management	Policy Briefing (D5.9)	Website, Newsletter, social media, Workshops, Presentations & Print	M42	regional, national & international
	Peer-reviewed Publication on case studies in restoration of stream connectivity	Peer-reviewed Publication (D5.3)	Website, Newsletter, social media, Workshops, Presentations & Print	M48	Local, regional, national & international

WP	Output	Dissemination Tool	Dissemination Channel	Time	Target Audience
5	Short description AMBER project + call to action	Flyer	Website, Newsletter, social media, Workshops, Presentations & Print	M4	Local & regional
	Video on project set-up, challenges and expectations	Short video	Website, Newsletter, social media, Workshops & Presentations	M12	Local, regional, & national
	Video on progress and preliminary results			M24	Local, regional, & national
	Video on project outcome and results			M36	Local, regional, national & international
	Smartphone/tablet application (AMBER app)	Smartphone App (D5.4)	Website, Newsletter, social media, Workshops & Presentations	M18	Local, regional, & national
	The citizen science program	Citizen Science (D5.8)	Website, Newsletter, social media, Smartphone App, Workshops, Presentations & Print	M18	Local, regional, & national
	Best practice guidance document on adaptive barrier management	Project report (D5.10)	Website, Newsletter, social media, Workshops, Presentations & Print	M48	regional, national & international



### 3 SUMMARY

The Knowledge Translation Strategy describes the measures the AMBER consortium will use to communicate the aims and outputs of the project, both internally and externally. It also gives details of the plan deigned to translate knowledge into usable application material. This document serves as a management tool for both the project partnership and the European Commission to ensure that the AMBER communication activities are adequately and timely planned and implemented.