



Project description

*LIFE Climate-proof pollution **S**pread and **W**arning
International **M**odel for the Rhine*

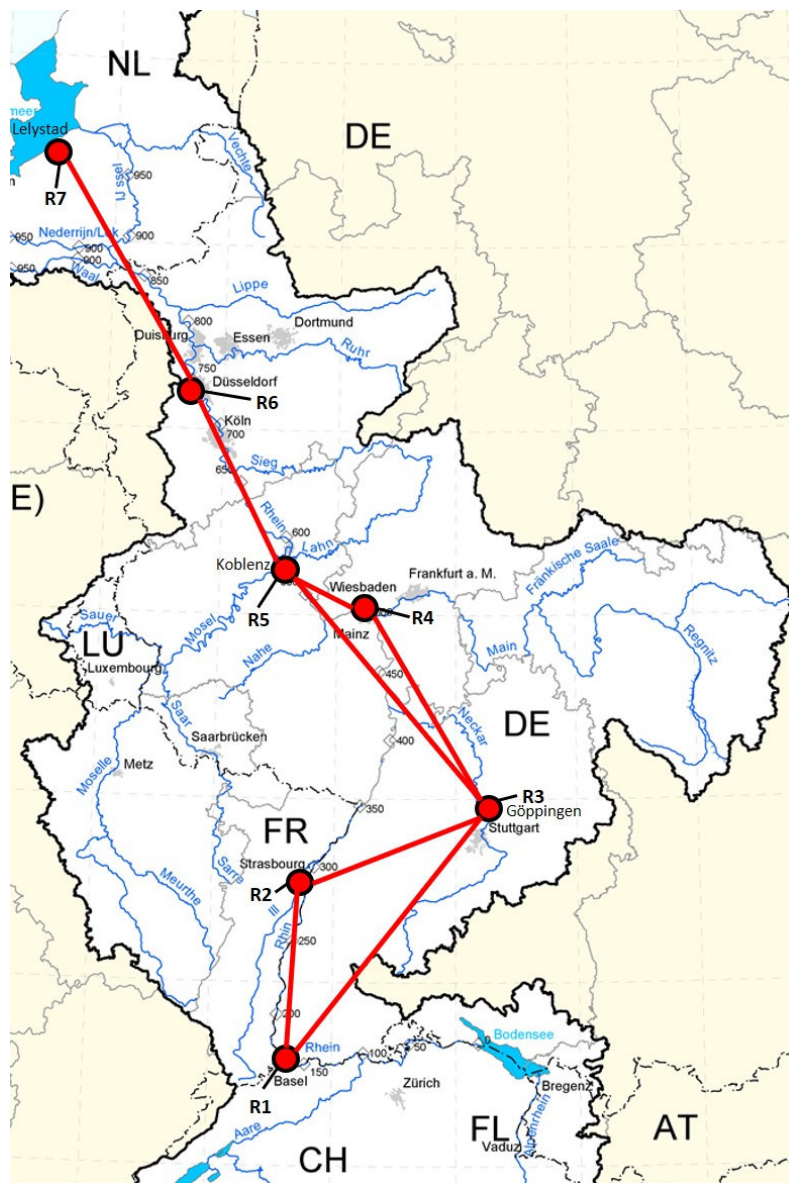
(LIFE C-SWIM RHINE)

The ICPR and its International Warning and Alarm Plan

Since 1950, the International Commission for the Protection of the Rhine (ICPR) has united Switzerland, France, Germany, the Netherlands, Luxembourg and the European Union – later expanded to Austria, Liechtenstein, and Belgium's Wallonia region – to safeguard one of Europe's most meaningful rivers. The River Rhine plays an important role in several sectors, including transportation and drinking water supply, and energy generation. It also hosts a precious biodiversity. An international secretariat based in Koblenz (Germany) supports the president and bodies of the ICPR. Learn more: www.iksr.org/en.

In response to a series of industrial accidents in the 1980s, the ICPR and its member states set up the **International Warning and Alarm Plan Rhine (IWAP Rhine)** ([IWAP Rhine](#)), a critical tool for fast information exchange among the seven International Main Warning Centres (Figure 1). It covers the stretch from the outlet of Lake Constance to the North Sea, with several industrial agglomerations along its way. Should accidental water pollution occur despite precautionary measures, the IWAP Rhine enables the warning centres to inform downstream communities quickly and helps to identify unknown sources of pollution.

Figure 1: Map of the Rhine basin and its seven International Main Warning Centres.



Map of the Rhine basin and its seven International Main Warning Centres

The need to modernise pollution response for the Rhine

The IWAP Rhine is supported by a **pollution spread model** developed in the early 1990s. It enables the International Main Warning Centres to calculate the spread of pollutants – depending on the discharge point, the substance and the discharge. Given this the pollution spread model is a valuable tool to provide precise warnings.

Climate change poses many challenges – also for the now 30-year-old pollution spread model – as it increases the river system's vulnerability towards pollution. Therefore, the ICPR and its member states are planning to tackle the current challenges with a new climate-proof pollution spread model.

LIFE C-SWIM RHINE: A landmark EU-Funded project

With **EU LIFE funding from July 2026 to June 2028**, the ICPR and its member states are launching the project '**LIFE Climate-proof pollution Spread and Warning International Model for the Rhine**' (short: '**LIFE C-SWIM RHINE**'). This 24-month project aims to:

- **Develop an international, state-of the-art and climate-proof pollution spread model** for the Rhine and key tributaries.
- Integrate **high resolution, short processing time, retrospective calculation, with expanded coverage** (additional tributaries, tracer experiments).
- Create a **user-friendly, stress-tested model** that serves as a **blueprint for other river basins**.

Project timeline: key milestones

- Second half of 2026: EU-wide **tender** to find a **company** for model development.
- Autumn 2027: **mock-up version** and **draft user guide** available.
- Early 2028: **international test alarm exercise** and **workshop** for feedback and validation.

Institutions driving the project

The **ICPR secretariat** coordinates the project, supported by the already existing ICPR **expert group for the Warning and Alarm Plan Rhine ('EG SAPA')** and a dedicated core group. Key partners include:

- **Switzerland**: Amt für Umwelt und Energie Basel-Stadt
- **France**: Direction régionale de l'environnement, de l'aménagement et du logement de la région Grand Est
- **Germany**: Landesanstalt für Umwelt Baden-Württemberg, Regierungspräsidium Darmstadt, Landesamt für Umwelt Rheinland-Pfalz and Landesamt für Natur, Umwelt und Klima Nordrhein-Westfalen
- **Netherlands**: Rijkswaterstaat

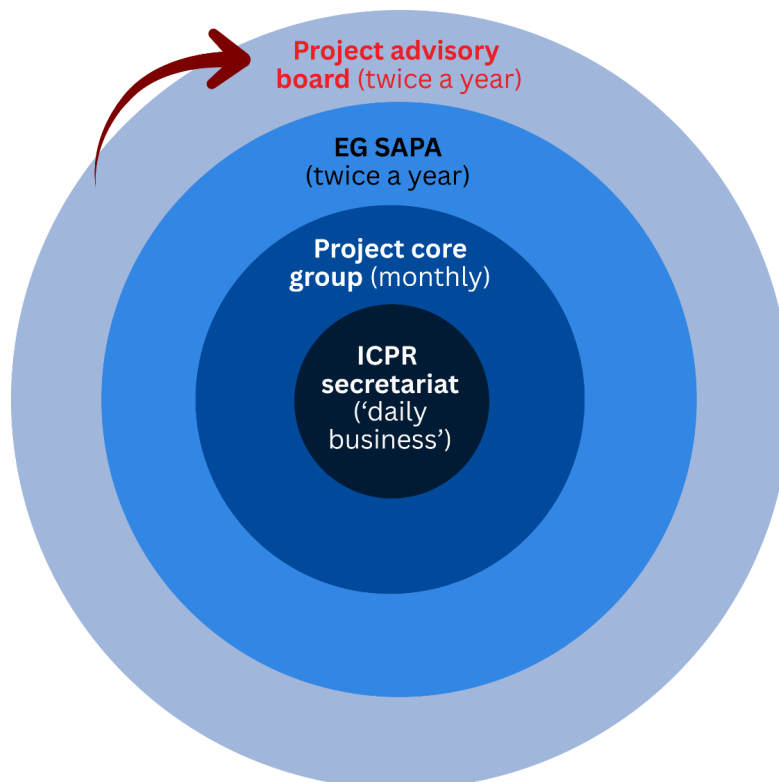
[NGOs and associations with observer status](#) in the ICPR such as BUND, CEFIC, IAWR, RIWA Rijn also provide valuable perspectives.

In addition, a **project advisory board** will be set up. Its goal is to ensure greater outreach and the transferability of the project to other river basins.

Potential members can come from

- national authorities working on similar topics (in other river basins),
- NGOs engaging in other river basins,
- other international river basin commissions, or
- scientific institutions.

The focus is on the European continent.



Your role: shape the future as a project advisory board member

The **project advisory board** is a unique opportunity to:

- **Contribute to the development** of a state-of-the-art and climate-proof model that will support river basin protection across Europe.
- **Bridge knowledge** between the Rhine and other river basins, ensuring the model's transferability and scalability.
- **Engage with a network** other national authorities, NGOs, international river basin commissions, and scientific institutions.

Commitment:

- **Two meetings per year (hybrid/online).**
- **Strategic input to maximize the project's outreach and impact.**

*If you are interested to participate, **please reach out to** Marc Daniel Heintz (executive secretary of the ICPR), mail: marcdaniel.heintz@iksr.de, phone: 00492619425219*