



Binnenwasserstraßenabschnitt mit besonderen Risiken Seewasserstraßen des Bundes Hoheitsgrenze Binnenwasserstraßen des Bundes ----- Staatsgrenze nicht klassifizierte BinWaStr Landesgrenze WaStr-Klasse I - III

WaStr-Klasse IV - VI

On the stretch between the lffezheim/Wintersdorf lock (Rh/km 335.92) and the border between Germany and France (Rh/km 352.07), the Franco-German border runs longitudinally through the Rhine. Therefore, a joint notification in accordance with Article 9(3) of Directive 2017/2397 is required.

Together with the German section up to Mannheim down the Rhine (Rh/km 425), this stretch forms the Upper Rhine. As is the case for the vast majority of the Rhine, on the Upper Rhine knowledge of specific situations is a requirement.

A designation of the Rhine between the Iffezheim/Wintersdorf lock (Rh/km 335.92) and the border between Germany and France (Rh/km 352.07) as a stretch of inland waterway with specific risks is required in accordance with Article 9 of Directive (EU) 2017/2397 for the safety of shipping. The origins of these risks are

- frequently changing stream patterns and speed (Article 9(1)(a));
- the hydro-morphological characteristics of the inland waterway and the absence of appropriate Fairway Information Services on the inland waterway or of suitable charts (Article 9(1)(b);
- a high frequency of accidents at a specific stretch of the inland waterway that is attributed to the lack of a competence that is not covered by the standards referred to in Article 17 (Article 9(1)(d).

Frequently changing stream patterns and speed

- The following fairway widths are found in this area:
 - 88 m between Rh/km 335 Wintersdorf and Rh/km 344.5 Steinmauern (confluence with Murg)
 - 92 m between Rh/km 344.5 Steinmauern and the border between Germany and France (Rh/km 352.07) (and beyond up to Rh/km 424 Mannheim)
- A constant change of fairways from left to right river banks requires concentrated navigation at all times.
- The many groyne fields on this section of the Rhine make it necessary to change
 meeting sides frequently from portside to starboard and vice versa. As a result, craft
 are rarely moving straight ahead. Instead, rapid adjustments of the course must be
 made. A rotational movement of craft greater than 30 °/min is often necessary at the
 transition points and in the narrow curves in this section of the Rhine.
- Changing currents.

The hydro-morphological characteristics of the inland waterway and the absence of appropriate Fairway Information Services on the inland waterway or of suitable charts

- Due to the erosion and displacement of grounds, there are strong movements of the bed. Depositions in the fairway or in the navigation channel occur frequently.
- In addition, there are some sites where insufficient depths can be found on the edges of the fairway.
- These constantly changing conditions cannot be represented in the fairway information services or maps.

<u>A high frequency of accidents at a specific stretch of the inland waterway that is attributed to</u> <u>the lack of a competence that is not covered by the standards referred to in Article 17</u> Due to the nautical particularities described above and the bed conditions, there is an accident black spot here. In particular, craft disproportionately often run aground or collide with structures such as groynes. Damaged craft must be regularly freed by other craft, which makes short term navigation bans necessary. There were 380 reported accidents in the Upper Rhine area between 2000 and 2017.

Need for the safety of shipping:

Due to the complex and difficult routing/navigation conditions, the number of patent holders here is low compared to other areas of the Rhine. The validity of the Rhine navigation certificate of many boatmasters ends upstream in Mannheim. On the Upper Rhine, a pilot regulation is in place. Currently, approx. 35 persons still pilot this area. This group does not cover by any means the need for nautical personnel, which can be deployed as boatmaster or consultant to the boatmaster. Even experienced boatmasters who are in possession of the Rhine navigation certificate for this section but have not navigated on the Upper Rhine for some time take an external boatmaster or pilot as additional personnel on board. As a result, craft sometimes have to wait for suitable nautical staff in Iffezheim or Mannheim to continue their journey.

This area has many cut-off meanders of the river Rhine with or without gravel dredging and some ports. In many places, commercial and/or recreational craft enter from or exit to secondary waters. In addition, there are secondary waters flowing into the Rhine which are used only by recreational craft. Boatmasters must therefore always be focused on possible intersecting traffic. Moreover, frequent and lengthy fog events with a visibility of less than 50 m require good orientation and route knowledge.

However, given the circumstances described above, the specific risks of this route cannot be mitigated by permanent traffic regulations. Special local knowledge of the route is therefore essential for the safety of shipping.