Additional competences to be demonstrated by boatmasters in accordance with the first sentence of Article 20(1) of Directive (EU) 2017/2397 to navigate stretches of inland waterway that present specific risks for navigation.

Rhine

Between Rhine km 335.92 Iffezheim and km 352.07 (border Germany/France)

A. Additional competences

Boatmasters who navigate on this stretch of inland waterways need knowledge of the characteristics and localities of this stretch of inland waterway in order to navigate safely.

- 1. They must be able to describe the route in up- or downstream navigation.
- 2. They must additionally have
 - a. detailed knowledge of the route characteristics,
 - b. detailed knowledge of the dimensions of the shipping route;
- 3. In addition, boatmasters must
 - a) have knowledge of the stream patterns and speeds on this section of inland waterways and must know how to adjust their navigation behaviour. This includes in particular knowledge of
 - the exceptional effect and importance of the groyne structures on this route;
 - the frequent changes of the meeting side from portside to starboard and vice versa, including the high degree of rotary motion required;
 - the location of the groyne fields in order to assess their impact on the flow;
 - the extremely high-density of secondary waters;
 - special regulations for craft of a specific length or more;
 - the particularly narrow fairway situations with the areas in which encounters with pushed convoys should be avoided;
 - the substantially changes of stream patterns and speeds;
 - the rules on minimum speeds of pushed convoys;
 - the specific requirements resulting from the high number of small craft;
 - b) the hydromorphological characteristics of this stretch of waterway and adequate responses to these conditions. This includes in particular knowledge of
 - the changing nature of the grounds of gravel banks, groyne fields and fine sediments;
 - the strong tendency for depositions with the formation of insufficient depths in the fairway;
 - the depth conditions also in the fairway in order to be able to give way to downstream vessels or use the optimal upstream route;
 - the position and location of places of refuge or emergency turning points in the event of unforeseeable blockades;
 - the high number of danger spots.

Additional competences to be demonstrated by boatmasters in accordance with the first sentence of Article 20(1) of Directive (EU) 2017/2397 to navigate stretches of inland waterway that present specific risks for navigation.

B. Steps necessary to demonstrate compliance with these requirements

The additional competences under A. are demonstrated by means of

- a test which,
 - o until 17 January 2027, is taken either in the form of an oral examination or a multiple choice test based on the requirements of the examination authority;
- \circ as of 18 January 2027, will be taken in the form of a multiple choice test; in combination with
- six passages (three upstream, three downstream) which have been conducted on the respective stretch in the last three years. During all these passages, the candidate must have been present in the pilothouse. During at least one upstream and one downstream passage, the candidate must have independently determined the course and speed. The passages are documented using the service record book.