The Automatic Identification System (AIS) has helped to avoid collisions and to improve the safety at sea since 2004. Ships signal their identity, report their position, course, and speed. This system makes risky encounters of ships in narrow and blind curves of inland waterways predictable. Another benefit is the improved management of mooring berths and ship-lock passages.

Further information:
Wasser- und Schifffahrtsverwaltung des Bundes
info@wsv.de
www.wsv.de
In Germany, all major waterways are in the ownership of the Federal Government. These federal waterways have an overall length of 7,350 km in the inland and cover in coastal and in maritime waters an area of 23,000 km².

The Waterways and Shipping Administration of the Federal Government (WSV) is in charge of their operation, maintenance, and development. The Waterways and Shipping Administration is subdivided into seven Waterways and Shipping Directories (WSD), 39 Waterways and Shipping Offices (WSA), and seven Offices for Waterway New Construction (NBA). On the whole, the Waterways and Shipping Administration has a personnel of some 13,000.

Three scientific institutions of the Ministry of Transport, Building and Urban Development - the Federal Waterways Engineering and Research Institute (BAW), the Federal Institute of Hydrology (BfG), and the Federal Maritime and Hydrographic Agency (BSH) - support the WSV’s practical and operational work with consulting, research, and development services.
With its 3.5 million inhabitants, Berlin is the biggest city in Germany. The city abounds in waters; there are more than 30 rivers and lakes that are interconnected by 200 km of waterways. The passage of ships between the rivers Havel and Spree is facilitated by 20 ship locks. Some 1,000 bridges embellish the cityscape (For comparison: Venice has just 450 bridges). The Museum Island is part of an island in the River Spree in the very heart of Berlin, with the Bode Museum on its northern end. This unique ensemble of buildings and cultural sites on the Museumsinsel with five world-famous museums became part of UNESCO’s list of World Cultural Heritage sites.

Further information:
Wasser- und Schifffahrtsverwaltung des Bundes
info@wsv.de
www.wsv.de
With 300 tonnes turnover in the year 2010, the German seaports are essential places of transshipment and support considerably the trade activities within Germany and the entire global market. The largest German ports on the North Sea are those of Hamburg, Bremen/Bremerhaven, and Wilhelmshaven with a total turnover of some 230 million tonnes of goods in the year 2010. The German ports on the Baltic Sea (Lübeck, Rostock, etc.) handle altogether 70 million tonnes of goods. Germany’s largest inland port at Duisburg has an annual turnover of 50 million tonnes.

### Seaports

**Port** | **Transshipment of goods [million tonnes/year]**
--- | ---
Hamburg | 120
Bremen/Bremerhaven | 70
Wilhelmshaven | 40
Lübeck | 26
Rostock | 24
Kiel | 6

Further information:
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info@wsv.de
www.wsv.de
Since 1934 the Niederfinow ship lift has provided the shipping connection between the River Havel (Berlin) and region of the River Oder (Baltic Sea).

The largest ship-lift in Europe is an attraction for about 500,000 visitors each year.

By the year 2014 a new, even larger ship lift will be completed at costs around €300 million.

Further information:
Wasser- und Schifffahrtsverwaltung des Bundes
info@wsv.de
www.wsv.de
The ship-lock Uelzen

In 2006, the ship-lock Uelzen was inaugurated, the largest ship-lock with water-saving technology in the world. Besides the ship-lift Lüneburg (38 m) it is the second facility in the Elbe-Seiten-Kanal (lateral canal) that helps ships to overcome height differences. This canal connects the Mittellandkanal (MLK) between the Ruhr region and Berlin with Hamburg and the North Sea. Every day, about 90 ships pass the lock. Its annual performance is around nine million tonnes of goods.

Lifting height: 23 m
Useable chamber length: 190 m
Chamber width: 12.5 m
Lock-sill depth: 4 m
Chamber filling volume: 60,000 m³
Lockage time: 20 min
Water-saving rate: 70% storage
Construction costs: € 120 Mio.
The waterway crossing at Magdeburg provides the west-east link (canal) between the industrial agglomeration on the River Ruhr and Berlin. Moreover, it allows ships to turn into the River Elbe flowing to the north (Hamburg).

With a capital investment of about €350 million the waterway crossing is the most significant element of the Transport Project „German Unity“. Its centrepiece is the canal bridge spanning over 918 m (of these 690 m foreland bridge and 228 m river bridge) with a channel width of 90 m.

Other major river-engineering structures are the water-saving ship-lock Rothensee (linking the canal and the River Elbe), the ship-lift Rothensee (linking the canal and the harbours), the twin-lock Hohenwarthe with water-saving technology (linking the canal and the Elbe-Havel-Canal), and the ship-lock Niegripp (linking the River Elbe and the Elbe-Havel-Canal).

Further information:
Wasser- und Schifffahrtsverwaltung des Bundes
info@wsv.de
www.wsv.de
Traffic Control Centres

The safety of navigation and the orientation in the coastal fairways are ensured by the Waterway-traffic Control Centres Cuxhaven and Brunsbüttel on the North Sea as well as Travemünde and Warnemünde on the Baltic coast.
The Central Command for Maritime Emergencies (CCME) was established in 2003 at Cuxhaven to coordinate joint actions in cases of accidents at sea.
The Regional Waterway-traffic Control Centres in Duisburg, Oberwesel, Minden and Magdeburg are in charge of these tasks on the inland waterways. They also respond in cases of accidents or environmental pollution.

Further information:
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info@wsv.de
www.wsv.de