Series 5: Inland Waterway Traffic

Map 1: *Inland Waterway Traffic in Central Europe, 1845-1855*

The map shows traffic flows on inland waterways for three years – 1845, 1850, 1845 – in and out of the German Customs Union (the *Zollverein*), the "economic precursor" of the German Empire founded only in 1871. Data on trans-border traffic is scarce: only three trans-border crossing points can be mapped: Emmerich, where the German notations on the Rhine traffic between Germany and the Netherlands were taken; Passau, which reports traffic on the (German) Danube into and from the (Austrian) Danube, and Schandau, where statistics were taken on the traffic between Austria (Bohemia) and Saxony (Germany). Even at first glance, the dominant position of the Rhine becomes readily apparent, where in 1855 more than half a million tons of goods were shipped from Germany into the Netherlands, and about half of this amount (270.000 tons) are transported upstream and into Germany. At Schandau, there is a sizeable transit of goods into Germany (280.000 tons in 1855), but flows from Saxony (Germany) into Bohemia (Austria) are so small that an inset map- using a different scale - needed to be constructed in order to visualize the diagram. At Passau, finally, only some rather obscure data on transport of colonial goods (*Handelsgüter*) could be marshalled as evidence and needs to be interpreted with considerable care.

Map 2: *Inland Waterway Traffic in Central Europe, 1860-1870*

During the fifteen years charted in this map the overall picture has not changed much, only the quantities of the flows have increased. The virtual collapse of traffic on the Elbe River in 1865 may well be the result of the Austrian economic blockade of the German Customs Union – to which Austria did not belong - and foreshadows the so-called "German War" of 1866 which led to the breakup of the German Confederation and thus to the political separation of Germany and Austria.

Map 3: *Inland Waterway Traffic in Central Europe, 1873*

As of 1873 the statistical data presented in these maps was compiled by the newly founded German Statistical Office and is less heterogeneous and thus more reliable. Two further crossing points have been added: Thorn in Prussia, where traffic on the Vistula between Prussia/Germany and Poland/Russia is recorded, and Lagarde, situated in the annexed territory of Alsace-Lorraine, and thus showing traffic flows between Germany and France on the Rhine-Marne-Canal. Traffic flows on the Rhine at Emmerich still dominate the picture, with Schandau/Elbe and Lagarde coming in at a distance. Export of goods at Passau has become visible and more noticeable.

Map 4: *Inland Waterway Traffic in Central Europe, 1881*

Beginning in 1881, the German authorities began collecting more reliable statistical information on the rafting of timber, particularly in the eastern portions of Prussia, where the wood trade was an important element in trade relations with Russia/Poland. For the crossings of Thorn (Vistula) and Schmalleningken (Niemen) new transparent arrows have been placed into the map to visualize timber traffic. As can be seen, it was substantial in volume. Trade

with the Netherlands has reached some 2.5 million tons, while at Schandau 1.3 million tons were brought into Germany by barges.

Map 5: *Inland Waterway Traffic in Central Europe, 1890*

By 1890, the Rhine is still the main artery of inland waterway traffic, and exports/imports to and from Germany and Netherland have become equalized in volume. Owing to river improvements and the introduction of new technologies (shipping by iron chain or *Kettenschifffahrt*), transnational traffic on the Elbe River has greatly picked up as well, as have movements of goods on the Danube, i.e. from Austria into Germany. In contrast to the increased volume of traffic by barge, timber rafting in the east has stagnated and thus declined as compared to traffic on ships.

Map 6: *Inland Waterway Traffic in Central Europe, 1899*

The decade of the 1890s witnessed a major increase in waterway shipping in central Europe. The importing of goods from the Netherlands nearly tripled from 3 to 8.5 million tons, while exports stagnate at a high level of 3 million tons. Traffic on all other waterways is "dwarfed" in comparison to that on the Rhine.

Map 7: *Inland Waterway Traffic in Central Europe, 1908*
The same overall pattern continued in the first decade of the 20th century. Traffic at Emmerich has risen to some 20 million tons, two-thirds of which are imports into Germany. Goods traffic at Lagarde (into France), Schandau (from Austria), and Schmalleningken (from Russia) has increased as well, while timber rafting in the eastern provinces of Prussia has decreased in comparison.

Map 8: *Inland Waterway Traffic in Central Europe, 1913*

In this map a variable scale had to be used in order to chart the diagrams. Some 40 million tons of goods passed through Emmerich in the last year of peace prior to the First World War, so for all other points of trans-border passage a different scale has been used which can be measured in the scale-diagram. The Elbe River at Schandau still is the second most important crossing, with 2.3 million tons being shipped into Germany (and in transit to the seaport of Hamburg) there.

Map 9: *Traffic on Small Inland Waterways, 1881-1913*

This map shows traffic flows at minor border crossings, where traffic was so small, that it would not be visible in the previous maps because of the scaling factor. But for two regions – northern Netherlands and eastern France this local traffic was important as it developed during the last third of the 19th century, giving clues of traffic flows on the Moselle River, the Rhine-Rhône-Canal (both into France) and four regional/local canals linking the north west German plains to Frisia and Holland in the Netherlands.