

# DESIGN OF THE THREE NATIONS FOOTBRIDGE OVER THE NYSA ŁUŻYCKA RIVER

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## Summary

Although the idea of enabling pedestrian communication over the tri-border area between Poland, Germany and the Czech Republic is not new, it has become realistic only after all the three countries joined the European Union and the borders have been opened. This idea was particularly supported by the inhabitants of neighbouring towns (Bogatynia, Zittau and Hrádek nad Nisou) and tourists visiting this corner of Lusatia. A tender for design of the new footbridge was concluded in 2017 at the initiative of the authorities of the Lower Silesian Voivodship (Poland), with the support of local government authorities of foreign partners.

The project assumes construction of the footbridge as a part of pedestrian and bicycle path network at the tri-border area of Poland, Germany and the Czech Republic. It consists of the main footbridge – a steel three-arm cable stayed structure over the Nysa Łużycka River (Fig. 1) and three multi-span reinforced concrete structures providing independent access from each of the countries. A central platform situated above the tripoint connects the three arms of the deck. Each arm of the main footbridge is a steel box girder suspended with a single plane of stays to a slender pylon inclined towards the central platform (Fig. 1). Backstays are anchored in steel cross beam fixed in a concrete frame structure in which the pylon is also fixed. Distance between each pylon's base and the tripoint (central platform) is 36.50 m.

It can be hoped that the new footbridge, apart from its utilitarian communication function, will become a symbol of cooperation between the Polish, Czech and German nations in the united Europe.

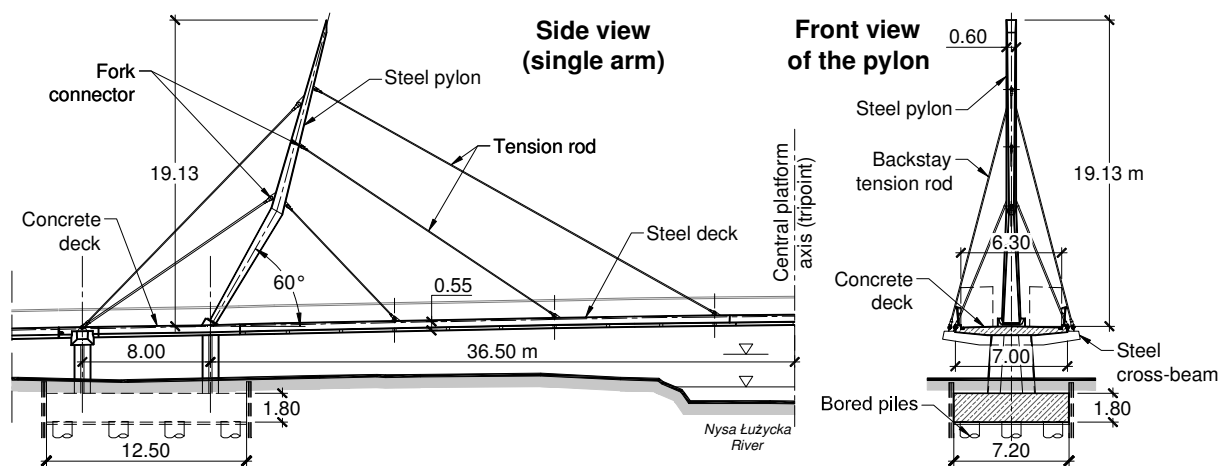


Fig. 1. Footbridge of the Three Nations: main dimensions and computer visualizations

**Keywords:** international bridge; landmark bridge; steel structure; cable-stayed footbridge

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