## **Expertise**



## Competences in Railway Bridges

Equi Bridges possesses specialized knowledge covering the entire service life of railway bridges, from the project initiation, through the conceptual design, detailed design, design proof check and site supervision to the inspection and assessment of bridges in operation. Further fields of expertise include monitoring and retrofitting of existing bridges.

Michal Majka has extensive research and practical experience in rail bridge dynamics and bridgetrack-train interaction for high-speed railways. Michal was working for Irish Rail, which provided him with a unique insight into the challenges faced by Railway Infrastructure Managers. During that time, he was involved in a number of technically complex and multidisciplinary refurbishments, which he carried out throughout the full project cycle from the inception through the structural assessments and designs, to the site work executed in constrained and highly pressured environment during short-term (36-72 hours) rail closures.



Michal Majka PhD, MSc, CEng, MICE, MIEI Senior Bridge Engineer

Vasco Amaral was also working on the rail owners' side for Rail Baltica where he was responsible for the structures on the new high-speed line connecting central Europe. His long-span bridge design experience was also extensively used in the coordination and development of major railway crossings in the conceptual and value engineering phases. His construction experience includes the design and technical assistance during construction of new medium span railway viaducts and the retrofitting of centenary iron bridges. One of the key aspects in the elaborated solutions is keeping the railway traffic operational during the intervention.

Maria Kierzek specializes in the planning of rail bridges, from feasibility studies and project generation for double-track extensions to the detailing of construction projects in coordination with catenary and signal system planners.

We can also draw on **Dawid Wisniewski**'s experience in the planning of the British High Speed 2 (HS2) and in the development of new standard bridges for the Polish Railways PKP. Andrew Phillips carried out the inspection of existing steel overpasses in the UK. Kristian Schellenberg inspected the condition of approx. 140 structures of a 60 km long SOB railway line and elaborated a proposal for maintenance prioritizations for the bridge asset management.

Our entire team is looking forward to demonstrating our expertise by providing our services to your railway bridge projects.

