

Major Infrastructure Projects and Civil Engineering Chartership Process in the UK

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Abstract

Infrastructure projects are critical to the development and maintenance of a nation's economic and social well-being. In the UK, these projects encompass a wide range of activities, including the construction and maintenance of railways, water supply systems, energy networks, roads and bridges. Notably, the High Speed 2 (HS2) and Sizewell C projects stand out for their significant contributions to the UK's infrastructure landscape. HS2, a high-speed railway, aims to enhance connectivity between major cities, reduce travel times, and increase rail capacity, thereby supporting economic growth and regional development¹. Similarly, the Sizewell C nuclear power station is poised to play a crucial role in the UK's energy strategy by providing reliable, low-carbon electricity, which is essential for meeting the country's net-zero emissions targets and ensuring energy security. The successful delivery of these projects relies heavily on the expertise and professionalism of civil engineers, many of whom seek chartership through the Institution of Civil Engineers (ICE).

The chartership process for civil engineers in the UK is a rigorous pathway designed to ensure that engineers possess the necessary skills, knowledge, and experience to manage complex infrastructure projects. This process typically involves obtaining an accredited degree, completing Initial Professional Development (IPD), and passing a Professional Review. Achieving chartered status (CEng MICE) not only enhances an engineer's career prospects but also assures employers and clients of their capability to deliver high-quality infrastructure projects in the UK. Chartered engineers are recognized for their expertise, ethical standards, and commitment to continuous professional development, making them invaluable assets in the planning, design, and execution of infrastructure projects.

Short Bio

Ercument Basbug is a Chartered Civil Engineer with a PhD degree and has over 19 years of experience on international infrastructure and rail projects. He has a proven track record of project, design and interface management of large-scale infrastructure and rail projects in different cultural settings. He has a breadth of experience covering technical excellence, project and programme management, civils design, utilities coordination, track design, geotechnical design, and smart cities. He creates project execution plans, leads technical reviews, and collaborates with clients and external stakeholders. He leads, manages and co-ordinates multidisciplinary teams to achieve the desired output in infrastructure/rail environment on time and within budget.

Throughout his career, he has been involved in a broad spectrum of projects such as high-speed rail, ports, nuclear stations, heavy rail, metro, LRT, rail rehabilitation projects, depot maintenance facility planning and at-grade, underground/viaduct station design projects from early feasibility studies to detailed design. He also has experience in road/highway projects.

Currently, he is working in the AtkinsRéalis London Office Infrastructure Department as an Associate Civil Engineer. Since joining AtkinsRéalis, He has been involved in major projects such as Sizewell and Simandou. He is a Line Manager and Institute of Civil Engineers' Supervising Civil Engineer. It is his passion to train and mentor staff and university students to become respected engineers and also to gain chartered membership of the Institute of Civil Engineers. He is also active in bidding, training, recruiting and resourcing within our large department, and has a wide range of international contacts and peers within AtkinsRéalis, Arup and across the industry.

Prior to joining AtkinsRéalis, He worked in four different Arup Offices including London, Birmingham, Manchester, and Istanbul. He worked in Arup as a Senior Civil Engineer and worked on high profile rail projects such as HS2 and Network Rail Projects. This provided him an excellent opportunity to lead international design teams and work with multinational contractors. In the start of his career, he worked as a Civil Engineer and an Assistant Project Manager in a prestigious engineering company in Turkey. He gained experience of track design in high profile metro projects and was involved in road/highway designs. He also worked in Copenhagen/Denmark as an acoustical engineer as part of my post graduate studies. In addition to his PhD degree, he holds two master's degrees on engineering and also completed a master's training on Smart Cities in London Imperial College.

Having worked in the UK, Turkey, and Denmark, he has gained invaluable international experience in multidisciplinary infrastructure and rail projects from bidding stage to construction design delivery.