

Structural Engineering Global Interoperability: What and Why

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Abstract

Like-minded structural engineering organizations should work together to allow participants in the design and construction industry to more readily operate on a global platform. We call this Global Interoperability, and in its most general sense it is a vision where our industry is structured to readily facilitate people, organizations, and systems to work across geographic and other boundaries.

Besides the obvious benefit of sharing of resources to achieve a common goal, Global Interoperability will be particularly advantageous for structural engineers who are highly qualified, globally adept, creative, and value-producing.

The idea of Global Interoperability does not imply a homogenization of education, licensure, standards, and language. Indeed, regional differences in approach are both expected and desirable to foster innovation. Instead, the goal of Global Interoperability should be to identify and break down unnecessary and wasteful barriers to collaboration and enable the advancement of the profession worldwide. Some elements of standards and practices may be common across boundaries. In other cases, say in codes and standards, it may be desirable to define a structure or framework for a global approach, which accommodates regional variations.

Global Interoperability is a long-term vision and results of deliberate collaboration with other professionals in the field of structural engineering, and will require a sustained, incremental progress to promote a successful structural engineering profession. Other industries such as medicine, law, and public safety are working towards Global Interoperability. To the author's knowledge no structural engineering organization has taken a leadership role in promoting Global Interoperability.