EDITORIAL

Going Global

Introducing the SEI/ASCE Global Practice Guide

By Anne Ellis, P.E., FACI, F.ASCE, NAC

Did you know in some countries the workweek is Saturday – Thursday? That some countries use decimal commas where others use decimal periods when writing numbers of 4 places or more? That some countries have neither national, regional nor local building codes nor standards? When working outside the U.S., local practices, different from our own, can wreak havoc on structural engineering projects if not adequately anticipated and addressed. In consideration of such, some may ask, why work outside of the U.S.?

Structural Engineering increasingly is becoming a profession that crosses national borders. Advances in technology, increasing interdependent economies, and emerging market investment in infrastructure and real estate enable structural engineering practice opportunities outside of the U.S. These opportunities are significant and allow structural engineers to participate in projects of grand scale and challenge. These ventures allow structural engineers to share and transfer their high-value knowledge. These global projects allow structural engineers to work with different codes and standards and be exposed to different materials, means, and methods. When considering projects outside the U.S., the opportunities must be balanced by the multiplicity of risks, including government instability, even regime collapse, that may result in people and assets stranded for extensive periods and with little recourse.

Successful global practice requires structural engineers to embrace skills, traits, know-how, and awareness not only technically but also in areas outside their field of technical training. The extension of skills, traits, and know-how varies greatly depending on the client whose activities you are supporting. U.S.-based clients operating overseas and utilizing the codes, standards, specifications, and contract constructs common in the United States reduce many, but not all, of the risks of working outside the country. Compare that to foreign-government clients who may lack legal and technical governance frameworks – including governing codes, standards, specifications, and contracts – that those practicing in the U.S. take for granted.

To aid structural engineers in successful global practice, the Structural Engineering Institute (SEI) of ASCE developed the *Global Practice Guide* (the Guide), available to SEI/ASCE members for free download. The Guide is a manifestation of the SEI Vision for the Future, a work product of the SEI Global Activities Division (GAD), written by SEI members and produced with funding from the SEI Futures Fund. This SEI-led Guide also will prove valuable to those practicing civil as well as other engineering disciplines.

The Guide highlights areas requisite for global practice that are beyond the U.S.-based structural engineer's domestic field of training and addresses culture, design and construction, and legal and financial issues. The intent is to raise awareness of and seed inquiry into specific topics from those that can provide appropriate assistance. The Guide will prove valuable whether you are contemplating global practice, considering go-no-go decisions on specific opportunities, and/or formulating project plans. An extensive list of topics is covered (*see box*).

The Guide also provides country-specific information and examples. The Guide does not address considerations related to the establishment of an in-country office.

Structural Engineers thriving in global practice recognize there is no single way of doing things when working globally. They identify and plan for the local differences. They recognize that every client, country, local society, and workforce is unique. These differences are anticipated, accommodated, and adequately resourced. Legal, financial, and human resource professionals with global expertise are essential to informing and guiding the structural engineer's success.

Working outside your home country can be a very attractive proposition. Many engineers are motivated to make a difference where the need is greater. Some structural engineers may be attracted by the idea of traveling to and even living somewhere different. The idea of new technical challenges may attract others. And, for many, it may be something never considered but an opportunity offered by their employer, an opportunity that may enhance the chance of promotion, even fuel a career. Whatever the attraction or motivation, opportunities are great for those who are willing to go global. This Guide is intended to inform those structural engineers of the basic considerations imperative for success.

Topics Covered

- Cultural intelligence
- Cultural dynamics
- Communication
- Multicultural teams and workforce
- Business etiquette
- Codes and standards
- Sustainability rating systems
- Resilience
- Construction practice, including means and methods
- Labor: Skills and languages
- Safety: Personal, liability, and responsibility
- Metric system
- Project delivery types
- Expectation of deliverables
- Infrastructure: Technology, phone, power, and transportation
- Team structure
- Standard of care and other legal regimes
- Rule of law
- Registration
- Anticorruption
- Local tender rules
- Contracts
- Insurance
- Professional liability
- Intellectual property and confidential information
- Export controls
- Cybersecurity
- Employment
- Cost and pricing
- Currency considerations
- Taxation
- Local accounting rules
- Banking

Are you interested in advancing structural engineering global practice? If so, consider joining an SEI GAD committee. GAD is responsible for increasing SEI members' awareness of global issues that impact our profession and facilitating the development of skills that will allow SEI members to thrive in the world market. The Global Credential Committee is charged with enabling global structural engineering credentials; the Inter-organizational Collaboration Committee is charged with establishing partnerships with other organizations to mutually advance efforts of benefit to the profession. Learn more at **www.asce.org/SEIGlobal**.

Access and share your feedback on the Global Practice Guide at **https://bit.ly/2RFwcuM** (member login required).▪

Anne Ellis is Executive Director of the Charles Pankow Foundation, advancing better ways to design and build. She served as the American Concrete Institute President (2013-2014) and held enterprise positions at AECOM (2008-2016), advancing the global impact of both organizations.