



The Practice of Forensic Structural Engineering in IABSE Member Countries: Review of a Survey

**Synopsis of the presentation at the IABSE Conference in Geneva, Switzerland
September 23-25, 2015**

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Abstract

The IABSE Working Group on Forensic Structural Engineering aims to examine and mitigate failures, improve the professional practice of forensic structural engineering, and facilitate the dissemination and application of failure information to structural design and construction throughout the world.

This article is the second progress report on the evaluation of the Working Group's completed, and recently revitalized, survey of the forensic engineering practices in the IABSE member countries. The intent of the article is to familiarize the reader with the state of forensic engineering practices in the IABSE member countries, and urge the adoption of good practices by following the successful models of some of the countries.

Keywords: forensic structural engineering; collapse; failure.

1 Introduction and background

Failures of structures occur in all parts of the world as the result of design deficiencies, construction defects, abuse or misuse, lack of maintenance, aging and deterioration, and environmental effects such as wind, flood, snow and earthquakes. The technical and legal manners of treating failures by first response, engineering investigation, claims of damage, dispute resolution, litigation, and application of the lessons learned, however, are different in various countries. The response of 'forensic engineers', where the designation exists, to disasters is an organized activity in some countries but a

haphazard activity in most others.

The IABSE Working Group on Forensic Structural Engineering, formed in 2011, aims to examine and mitigate failures, improve the professional practice of forensic structural engineering, and facilitate the dissemination and application of failure information to structural design and construction throughout the world.

One of the first activities of WG8 was the conduct of a survey of the forensic practices in the IABSE member countries. After an initial survey of the US and a limited number of European countries conducted in 2012 [1], in 2013-2014 the WG8 has developed a more detailed survey, and expanded it to all 48 IABSE member countries. The survey