

## **SEISMIC DESIGN OF STEEL STRUCTURES: NEW TRENDS OF RESEARCH AND UPDATES OF EUROCODE 8**

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### **ABSTRACT**

The European standards for the design and verification of structures are currently under revision. Indeed, after 10 years from their final issue, some criticisms arose as a consequence of both the scientific findings and the design experience gained in Europe. For these reasons, a European program for the revision and harmonization of Eurocodes (mandate M/515 “Evolution of the Structural Eurocodes”) is currently ongoing within the framework of CEN/TC 250, which shall be completed by 2020. The revision process of the rules for the seismic design of steel and steel-concrete structures (currently given by Chapters 6 and 7 of Eurocode 8 part 1) is supported by a specific working group (WG2) of the commission TC250 / SC8 that, in cooperation with the ECCS Technical Committee 13 (TC13), will provide the relevant preliminary documents to the Project Team in charge of drafting the new version of the code. In this perspective, this paper summarizes the critical issues and main aspects that require further insights into the field of steel structures in seismic areas, as well as the recent and currently ongoing relevant research activities that justify the relevant normative updates.

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