

D 4.3

## Software tool for sustainable refurbishment of existing bridges





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#### Colophon

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## 1 Executive summary

This report presents deliverable D4.3 from Work Package 4 of the SUREBridge project, defined in contract documentation as “Software tools for sustainable refurbishment of existing bridges”.

The work behind this report has been carried out from January to September 2017. The responsible partner for deliverable 4.3 was AICE Consulting Srl (AIC) with scientific support from the University of Pisa (UniPI). Based on the design model illustrated in deliverable D4.2 [1], a software tool has been developed for the evaluation of the resisting bending moment of strengthened cross sections at ultimate limit state (ULS).

Chapter 2 introduces the software tool and its main features. Chapter 3 describes in detail the input and output procedures. Chapter 4 illustrates a calculation example. Lastly, Chapter 5 presents a validation of the software tool by comparison with an example from the literature.