

Quality specifications and performance indicators for road bridges in Europe

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Abstract

Across Europe, multiple management systems were developed with the aim of managing roadway bridges in an efficient manner. Although being generically similar, the condition assessment process, based in the assessment of performance indicators which are compared with performance goals in order to evaluate the accomplishment of established quality control plans, can be identified as one difference among them. This leads to the existence of multiple different methodologies for assessing the bridge condition, and consequently to a considerable variation in roadway bridges quality. COST Action TU1406 aims to achieve the European economic and societal needs by standardizing the condition assessment and maintenance level of roadway bridges. For such purpose it would be required the establishment of specific recommendations for the quantification of performance indicators, the definition of standardized performance goals and, finally, the development of a guideline for establishing quality control plans.

Keywords: performance indicator, performance goal, quality control plan, roadway bridge, asset management.

1. Introduction

In the past years, significant worldwide research has been done regarding condition assessment of roadway bridges. Obtained values, which provide information regarding the assessed bridge condition state, are then compared with previously established goals. As a result, there are currently

several methodologies to assess the bridge condition.

More recently, the concept of performance indicator (PI) was introduced, simplifying the communication between consultants, operators and owners. However, large deviations continue to exist on how these indicators are obtained and,