



From ETAG to EADs – The ongoing development of the European regulatory system governing the design and manufacture of bridge expansion joints

Simon Hoffmann, Niculin Meng and Colm O'Suilleabhain

mageba Group, Bulach, Switzerland

Contact: cosuilleabhain@mageba-group.com

Abstract

The European Assessment Documents (EAD) introduced in 2020 by the European Organization for Technical Assessment (EOTA) to govern the technical assessment of expansion joints for road bridges represent a strong development from the corresponding European Technical Approval Guideline from 2013, ETAG 032. The EADs' requirements, which may be used by manufacturers to obtain a European Technical Assessment (ETA), significantly exceed those of any other common national specification for expansion joints in Europe or on an international level, especially in relation to the very demanding field and laboratory testing specified. This improved basis for the assessment of expansion joint performance can be expected to result in expansion joints that are far more robust and durable than those that are designed to comply with any other widely used standard.

Keywords: ETAG 032; EAD; EOTA; ETA; bridge; expansion joint; assessment; testing; certification.

1 Introduction

Efforts towards achieving widespread product standardisation across Europe in relation to bridge expansion joints have had mixed results to date, resulting in periodic modifications to the approval process that manufacturers must always take into account. In the absence of a harmonised European standard to cover the manufacture of road bridge expansion joints, a European Technical Approval Guideline, ETAG 032 [1], was issued in 2013 as a common approval guideline under the Construction Products Directive 89/106/EEC (CPD). ETAG 032, "Expansion Joints for Road Bridges", was issued by the European Organization for Technical Assessment (EOTA) as a basis for expansion joint manufacturers to gain a European Technical Approval with validity across the entire European Economic Area (EEA). However, in October 2020, with few expansion joint types having been issued

such a European Technical Approval, the CPD was superseded by the Construction Products Regulation (EU) No 305/2011 (CPR) [2], and ETAG 032 was replaced by a number of European Assessment Documents (EAD) which may be used by manufacturers to obtain a European Technical Assessment (the current meaning of the initialism "ETA"). This ETA, together with the EAD on which it was based and an associated Declaration of Performance (DoP), gives the basis for certification by a Notified Body, with applicability throughout the European Economic Area.

The CPR defines EADs, and ETAGs used as EADs, as "harmonized European specifications", which are coordinated among all EOTA member states. These may not be conflicted by national standards. For example, assessment methods, including Assessment and Verification of Constancy of Performance (AVCP), may not be changed by national regulations, which may, on the other