

To:

The Chief Executive
Unitary, Metropolitan, District and
London Borough Councils in England
County and County Borough
Councils in Wales
The Town Clerk, City of London
The Clerk, Council of the Isles of Scilly
The Sub-Treasurer, Inner Temple
The Under Treasurer, Middle Temple

The Head of Building Control
Unitary Metropolitan, District and
London Borough Councils in
England
County and County Borough
Councils in Wales
City of London
Council of the Isles of Scilly

Approved Inspectors

cc: The Chief Executive:
County Councils in England
National Park Authorities in England
& Wales

The Chief Fire Officer: Fire Authorities in
England and Wales

19 November 2009

Dear Sir or Madam

‘Dynamic performance requirements for permanent grandstands subject to crowd action; Recommendations for management, design and assessment’.

We are writing to inform you that the Institution of Structural Engineers has published a document entitled ***‘Dynamic performance requirements for permanent grandstands subject to crowd action; Recommendations for management, design and assessment’***. This publication provides guidance for those specifying, commissioning and operating grandstands that may be subject to dynamic actions

due to various crowd activities, the results of which can, for example, be vibrations with frequencies which may cause discomfort to those in the stadium.

Addressees are encouraged to draw the document to the attention of those responsible for the development and design of new grandstands and to those responsible for managing existing grandstands.

The guidance in this document provides recommendations for use in the design or assessment of permanent grandstands, and guidelines for clients and those with management responsibilities. It replaces the Interim Guidance published by the Institution of Structural Engineers in November 2001.

It includes recommendations on two methods for addressing dynamic actions due to crowd activity in the design and the assessment of permanent grandstands:

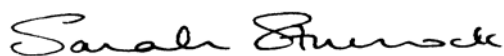
- one based on limiting values of natural frequency for an empty grandstand. This revises and extends the approach in the Interim Guidance; and
- an alternative, based on estimates of performance of grandstands calculated for specific managed events, which uses event scenarios and associated dynamic crowd loading, takes account of human / structure interaction, and provides the engineer with more flexibility and choice.

The document also includes recommendations on the use of “Listed Engineers”, who have appropriate specialised expertise and experience, in design teams dealing with new grandstands or significant alterations to existing grandstands, and in activities such as the assessment of existing grandstands. A scheme to identify appropriate Engineers is to be run by the Institution of Structural Engineers.

In due course Communities and Local Government intends to review and consult on proposed changes to the Building Regulations’ Approved Document A (Structure), including a proposal to change the current reference to the Interim Guidance document to a reference to the new guidance document. Until that change is made, the Department recommends as good practice the use and application of the new document; ***‘Dynamic performance requirements for permanent grandstands subject to crowd action’***.

This document is available as a payable download. If you require a printed version we do have a limited number which will be available on a first come basis. Please e-mail your request to thefuture@communities.gsi.gov.uk quoting the title, ‘*Dynamic performance requirements for permanent grandstands subject to crowd action*’ and the ISBN number 978-1-906335-12-0.

Yours faithfully



Sarah Sturrock
Deputy Director of Sustainable Buildings



Jonathan Hughes
Head of Sport
Department of Culture Media and Sport