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Stadium safety arrangements in other jurisdictions

This briefing paper seeks to compare stadium safety arrangements at sports grounds across three other jurisdictions: Republic of Ireland, USA and Australia.

1 Republic of Ireland

In the Republic of Ireland, there is no specific stadium licensing system as there is in Northern Ireland¹. Sports grounds must comply with general health and safety legislation: the Health and Welfare at Work Act 2005 and the Safety, Health and Welfare at Work (General Application) 2007 Regulations.

A *Code of Practice for Safety at Sports Grounds*² was created in 1996. The code is similar to the Red Guide³ and the Green Guide⁴ in that it makes specific recommendations on ingress and egress requirements, including specification of safe holding capacity and flow rates. It also describes the correct position of stairways,

¹ The relevant legislation in Northern Ireland is the Safety of Sports Grounds (Northern Ireland) Order 2006: <http://www.legislation.gov.uk/nisi/2006/313/contents>

² Government of Ireland. 1996. *Code of Practice for Safety at Sports Grounds*. Dublin: Department of Education: <https://www.education.ie/en/Publications/Education-Reports/Code-of-practice-for-safety-at-sports-grounds.pdf>

³ Department of Culture, Arts and Leisure. 2007. *The Northern Ireland Guide to Safety at Sports Grounds*. Belfast (often referred to as the 'Red Guide').

⁴ Department for Culture, Media and Sport. 2008. *Guide to Safety at Sports Grounds*. London: <http://nia1.me/2mr> (often referred to as the 'Green Guide').

ramps, crush barriers and seating, and states that an emergency plan and a traffic management plan should be created.

The code is also similar to the Green Guide in placing primary responsibility for safety with ground management. However, the code describes a specific role for the Gardaí Síochána as follows:

It is the responsibility of Ground Management to inform the Chief Superintendent of the local Garda division that a major event is to take place. The Chief Superintendent should take part in the Event Planning Meeting⁵.

The code states that certain considerations should be discussed at such a meeting, including the likelihood of violent conduct, the potential segregation of various supporters, and arrangements for the delaying or stopping of the event⁶. Where 'spectator violence or unruly behaviour' is anticipated, there 'should be written agreement between Ground Management and Gardaí setting out their respective responsibilities for all aspects of crowd control at events'⁷.

While the code is almost twenty years old it is still referred to by both the Football Association of Ireland (FAI)⁸ and by the Gaelic Athletic Association (GAA)⁹.

The Code of Practice states the following with regard to its scope and status:

The Code of Practice, which is a voluntary Code, will apply to all grounds with a holding capacity of 20,000 spectators or more. Managements of grounds at this level will be expected to comply with all the guidelines contained in the Code of Practice. Where grounds do not meet those guidelines measures should be taken within a reasonable time scale to remedy safety defects¹⁰.

In terms of an authority responsible for over-seeing implementation of the Code of Practice, the document, at the time of writing, stated the following:

The Committee on Public Safety and Crowd Control (February, 1990) proposed that a National Authority for Safety at Sports Grounds be established to monitor and oversee the operation and implementation of the Code of Practice, to perform an inspectorate function at certain sports grounds and to make recommendations to the appropriate Minister as to

⁵ Code of Practice. 1996. As above: p23.

⁶ Code of Practice. 1996. As above. p24.

⁷ Code of Practice. 1996. As above. p27.

² Football Association of Ireland. 2014. Club Licensing Manual: 2015 League of Ireland Season:

https://www.fai.ie/sites/default/files/atoms/files/2015%20Final%20Club%20Licensing%20Manual_0.pdf

⁹ GAA: Croke Park. 'Health and safety policy': <http://www.crokepark.ie/about/health---safety/health---safety-policy> Page accessed 12.10.15.

¹⁰ Government of Ireland. 1996. Code of Practice. As above: p2.

what action should be taken against grounds not complying with the Code of Practice or critical parts of it¹¹.

In terms of the current status of this proposal, no National Authority for Safety at Sports Grounds was ever set up. However, a previous Minister for Arts, Sport and Tourism stated in the Dáil Eireann in 2003 that,

Local authorities, gardaí and health boards play a central and ongoing role, in assisting ground management to meet their responsibilities and may, in certain circumstances, have to insist on specific measures being taken in order to achieve reasonable standards of safety¹².

2 USA

In the USA, there is no specific stadium licensing system as there is in Northern Ireland, and little standard practice in implementing safety and security at major sporting events. A diverse range of approaches are followed by the different levels of sport, in different leagues, and across different states¹³.

2.1 Federal legislation

While there is no federal stadium-specific safety legislation, some aspects of health and safety legislation must be followed by stadia. For example, the federal Occupational Safety and Health Administration (OSHA), an agency of the United States Department of Labor, is responsible for a set of standards and regulations which stadium managers must adhere to under the provisions of the Occupational Safety and Health Act 1970. Section E of Standard Number 1910 contains requirements on exit routes and emergency planning¹⁴.

For example, included within section 1910.36 are minimum requirements and dimensions for exit routes. There is a similarity with the Red and the Green Guides in that areas surrounding exit routes must have a one-hour fire resistance rating. Section 1910.37 includes specifications for 'operational features' such as guardrails, lighting, signage and communications.

In addition, Section 1910.38 sets out a requirement for an employer to have an emergency action plan. Minimum elements that such an action plan must contain are set out as follows (overleaf):

¹¹ Government of Ireland. 1996. *Code of Practice*. As above: p10.

¹² Houses of the Oireachtas. 5.11.2003. *Written Answers: Safety at Sports Grounds*: <http://debates.oireachtas.ie/dail/2003/11/05/00132.asp>

¹³ Personal communication with Dr Stacey A Hall, Associate Professor & Sport Management Associate Director, University of Southern Mississippi, 4.11.15.

¹⁴ US Government Publishing Office: Labor. Occupational Safety and Health Standards. Standard Number 1910: Subpart E – Exit Routes and Emergency Planning: <http://nia1.me/2sg>

- Procedures for reporting a fire or other emergency;
- Procedures for emergency evacuation, including type of evacuation and exit route assignments;
- Procedures to be followed by employees who remain to operate critical plan operations before they evacuate;
- Procedures to account for all employees after evacuation;
- Procedures to be followed by employees performing rescue or medical duties; and,
- The name or job title of every employee who may be contacted by employees who need more information about the plan or an explanation of their duties under the plan.

Though these requirements are not specific to sports stadia, all such stadia, as private employers, would have to adhere to them.

2.2 Fire safety guidance

In addition to this legislation, the National Fire Protection Association (NFPA) publishes a set of codes and standards which are intended to act as guidance in interpreting US building regulations. There are three NFPA publications in US building regulations that are concerned with stadia construction and safety¹⁵:

- NFPA 101: Life Safety Code
- NFPA 102: Standard for Grandstands, Folding and Telescopic Seating, Tents, and Membrane Structures
- NFPA 5000: Building Construction and Safety Code

One comparative study has indicated that,

*None of these are used throughout the USA but they are the most commonly accepted across the country*¹⁶.

Indeed, some recognition for the NFPA codes is made in the OSHA standards as it states in Section E of Standard Number 1910 that,

*OSHA will deem an employer demonstrating compliance with the exit-route provisions of NFPA 101, Life Safety Code, 2009 edition, or the exit-route provisions of the International Fire Code, 2009 edition, to be in compliance with the corresponding requirements in §§ 1910.34, 1910.36, and 1910.37 (incorporated by reference, see section § 1910.6)*¹⁷.

¹⁵ Hoskin, K. 2004. *Fire Protection and Evacuation Procedures of Stadia Venues in New Zealand*. Fire Engineering Research Report 04/4. Masters Thesis undertaken at the University of Canterbury, New Zealand; see also: National Fire Protection Association. 'Document information pages (List of NFPA codes & standards)': <http://www.nfpa.org/codes-and-standards/document-information-pages> Page accessed 19.10.15.

¹⁶ Hoskin 2004, as above: p21.

¹⁷ Occupational Safety and Health Administration. *Standard Number 1910, Subpart E Means of Egress. 1910.35. Compliance with Alternate Exit-Route Codes*: <http://nia1.me/2rg>

2.3 Stadium-specific guidance

The Department of Homeland Security published an *Evacuation Planning Guide for Stadiums* in 2008. Developed by a diverse working group including the Federal Bureau of Investigation, the Stadium Managers Association, and the Center for Spectator Sports Security Management at the University of Southern Mississippi, the guide is intended to 'provide a useful template for the stadium owner/operator to develop and customize a stadium specific evacuation plan', which itself forms an 'essential component' of a stadium's Emergency Plan.¹⁸

The *Evacuation Planning Guide for Stadiums* differs from the Green Guide and the Red Guide in that rather than making specific recommendations for the physical and managerial infrastructure required for safe evacuation, it instead provides a checklist of questions to be addressed as 'considerations'. The guide points out that answers to those questions will differ depending on the jurisdiction within which the stadium is situated:

...each stadium owner/operator should customize an evacuation plan to account for the unique policies and procedures of State and local governments, surrounding communities, and specific stadium characteristics¹⁹.

Further guidance is available to stadium management teams through the *Protective Measures Guide for US Sports Leagues*²⁰. As with the *Evacuation Planning Guide* referred to above, the *Protective Measures Guide* carries no legal weight under regulation or legislation. It makes suggestions for protective measures against a variety of different 'threat streams', largely related to terrorism. Included in these suggestions are measures such as establishing a secure perimeter, encouraging employees to report suspicious activities, and creating an organisation chart to identify key roles and responsibilities.

The content of the guidance documents referred to here would seem to suggest that emergency planning in sports stadia in the USA focuses on a slightly different range of threats to those perceived within a UK context. While alcohol-related offences and unruly fan behaviour have been factors which stadium management bodies have had to deal with, potential terrorist threats have been a particular focus since the events of 11 September 2001²¹.

As an indication of this increased focus on terrorism, the threat streams identified in the *Protective Measures Guide* include improvised explosive devices, chemical attack, aircraft attack and small arms assault. The *Evacuation Planning Guide* refers to a wider

¹⁸ Department of Homeland Security. 2008. *Evacuation Planning Guide for Stadiums*: <http://nia1.me/2ti> p1–2.

¹⁹ Department of Homeland Security. 2008. As above: p1.

²⁰ Department of Homeland Security, with MLB, MLS, NASCAR, NBA, NFL, NHL & USTA. 2008. *Protective Measures Guide for US Sports Leagues* : pp3–4.

²¹ Hall, SA, Fos, PJ, Marciani, L & Zhang, L. 2011. 'Value modelling in sport security planning: Setting priorities in security efforts at large spectator events', *International Journal of Sport Management* 12: pp1–17.

range of potential threats, including fire and structural collapse²², but neither document focuses on panic and crushing as explicit threats in their own right. There is therefore a focus on detection and security standards, rather than the specific nature of structural design required to allow the flow of a crowd as it exits a stadium at certain rates or in particular ways.

3 Australia

In Australia, there is no specific stadium licensing system as there is in Northern Ireland, though at least four large Australian stadia have used the Green Guide during their design phase²³. Instead, safety procedures must comply with the relevant 'Deemed-to-Satisfy Provisions' within the Australian Building Code (ABC)²⁴. There are no provisions which are specific to stadia, but a stadium would be considered a form of 'assembly building', therefore falling under Class 9b. Deemed-to-Satisfy Provisions for such constructions and technically specific, and include factors such as:

- Size, position, number and construction materials for exits;
- Exit travel distances (for example, in an open spectator stand, the distance of travel to an exit must be not more than 60m);
- Position and duration of fire isolation;
- Position and nature of stairways and ramps;
- Nature of crowd discharge through exits, including specification for evacuation time;
- Maximum crowd density.

The Building Code of Australia for Class 9b constructions sets out provisions for the nature of the structure but does not include wider safety considerations such as the creation of an emergency plan, communications infrastructure in the event of an emergency or medical provision.

Some large sports grounds in Australia have published their emergency evacuation procedures. For example, Melbourne Cricket Ground (MCG) has a set of emergency evacuation procedures on its website²⁵ and advises other stadia on how to prepare emergency plans²⁶.

The MCG procedures include specific details of the types of messages that will be relayed in the event of an emergency announcement, the ways in which they will be communicated, and what arrangements will follow in such a situation.

²² Department of Homeland Security. 2008. *Evacuation Planning Guide for Stadiums*: pp41–2.

²³ Hoskin 2004, as above: p25.

²⁴ Australian Building Codes Board. 2012. *National Construction Code Series. Volume 1: Class 2 to Class 9 Buildings*: <https://law.resource.org/pub/au/ibr/au.ncc.1.2012.pdf>

²⁵ Melbourne Cricket Ground. 'Emergency Evacuation Procedures': <http://www.mcg.org.au/about-us/policies/emergency-evacuation-procedures> Page accessed 2.10.16.

²⁶ Hoskin 2004, as above: p26.