Standards and Standardisation

An Overview

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Standards Development
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Reactive pyrite in sub-floor hardcore material

Part 1 Testing and categorization protocol
Work in progress

**SR 21**
National guidance to I.S. EN 13242
Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction

**SR 21 Annex E**
Recommendations for the specification of unbound granular fill (hardcore) for use under concrete floors and footpaths
Work in progress

Irish Standard
Code of Practice for the procurement and use of unbound granular fill (hardcore) for use under concrete floors
Work in progress

**SR 60**
Guidance on the use of:
I.S.EN 12620:2013 - Aggregates for concrete

I.S.EN 13043:2013 - Aggregates for bituminous mixtures and surface treatments for roads, airfields and other trafficked areas

I.S.EN 13139:2013 - Aggregates for mortar
National Standards Authority of Ireland

- Government Agency
  - promoting the development, use and compliance with National, European and International Standards and European Directives

- Mandate NSAI Act 1996

- Acts on behalf of the Minister for Jobs, Enterprise & Innovation, Richard Bruton.
NSAI Responsibilities

Development, Publication & Promotion of Standards
(To comment on new standards visit the ‘Your Standards, Your Say’ section on www.nsai.ie)

Certification and Inspection – Certifies a product or company to a Standard then audits for compliance

Legal Metrology Service – Calibration of equipment used in economic transactions
What are standards?

**National Metrology Laboratory** - maintenance and development of national standards for physical units and their dissemination to Irish users

**Agreement Service** – Certification of building materials, products or processes if published National Standards do not yet exist

**NSAI is a ‘Notified Body’** – Notified by the Irish Government to the European Commission as the body appointed by the State giving responsibility for **CE** Marking of Products.
Agreed criteria designed to ensure that products and services meet minimum thresholds

Define basic criteria in terms of functionality, performance, structure etc.
Why do we need Standards in the EU?

- Elimination of technical barriers to trade
- Protect the health & safety of product users
- Facilitate interoperability of products
- Support European free trade
- Provide means of conformity with relevant legislation

Eg: Harmonised standards detail the technical specifications required for the product to meet the essential requirements laid down in directives.
Types of standards

**Fundamental Standards** – Terminology, signs, symbols etc.
(e.g. ISO 1998-1 – Petroleum Industry – Terminology)

**Test Methods** – detail test and analysis methods for products
(e.g. I.S. EN 1744-1 Tests for chemical properties of aggregates - part 1: chemical analysis)

**Product Specification Standards** – define characteristics of a product or service
(e.g. I.S.EN 12620:2013 - Aggregates for concrete)

**Management System Standards** – describe the functions and structure/relationships within an organisation.
(e.g. ISO 9001 - Quality Management Systems - Requirement)
The standardisation of most products and services is a voluntary process

Unless established by law, through European Directives and Irish legislation

**CPR (EU) No 305/2011**

I.S. EN 13242 harmonised standard (hEN)

Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction
Irish Standard

I.S. 148 Flammability and Labelling Requirements of Fabrics and Fabric Assemblies Used in Children’s Nightwear

Statutory Instrument

Covered by S.I. 215/1979 Industrial Research and Standards (Section 44) (Children's Nightdresses) (Amendment) Order, 1979
Failures

Mars Climate Orbiter

Lockheed Martin engineering team used English units of measurement while the NASA team used metric.
Standardisation towards the global level

International level
- ISO
- IEC
- ITU

European level
- CEN
- CENELEC
- ETSI

National level
- NSAI (ETCI for Electro-Technical)

Industry and other stakeholders
Ireland (through NSAI) is obliged to adopt all European Standards (ENs) as National Standards. Standards published by CEN, CENELEC and ETSI

Ireland adopts many but not all International Standards
ISO, IEC, ITU
beneficial to our national interest
Standards Development

Irish Standards (I.S.)
National 10/year
Adopted EN’s 1500/year

Other National publications
Standard Recommendation
National Annex to EN’s
Swift
Recommendation of Pyrite Panel report 2012

NSAI Board approval of project

Notification

Call for participation from relevant interested parties
Appointment of chairperson

Document drafted, consensus
Public enquiry, comments resolution

Final editing
Seal by minister, publish
Notification Iris Oifigiuil

Five months start to publication
4 Working Groups National

- Bituminous Binders: CEN TC 336
- Asphalt: CEN TC 227
- Aggregates: CEN TC 154
- Surface treatments: CEN TC 227

- Road Equipment: CEN TC 226
Members – 33 National Standards Bodies (NSB)
NSB - one stop shop for all stakeholders

EN’s public consultation
- prEN 5 months
- FprEN 2 months

Irish input/comments through NSAI

1100 Irish Experts
Standards are not set in stone
Thank you for your attention

New participants to standardisation always welcome

NSAI Your Standards Your Say – Forum
Members of the public comment on any draft standard

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