



Institute of Geologists of Ireland

# Standards and Standardisation

# An Overview

#### **Therese Clarke**

**Standards Development** 



#### **NSAI Technical Committee 58/SCI**

#### Published - I.S. 398-1:2013

#### Reactive pyrite in sub-floor hardcore material

#### Part 1 Testing and categorization protocol



#### **NSAI Aggregates Panel**

#### 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



#### **NSAI Aggregates Panel**

#### Work in progress

#### **Irish Standard**

Code of Practice for the procurement and use of unbound granular fill (hardcore) for use under concrete floors



#### **NSAI Aggregates Panel**

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

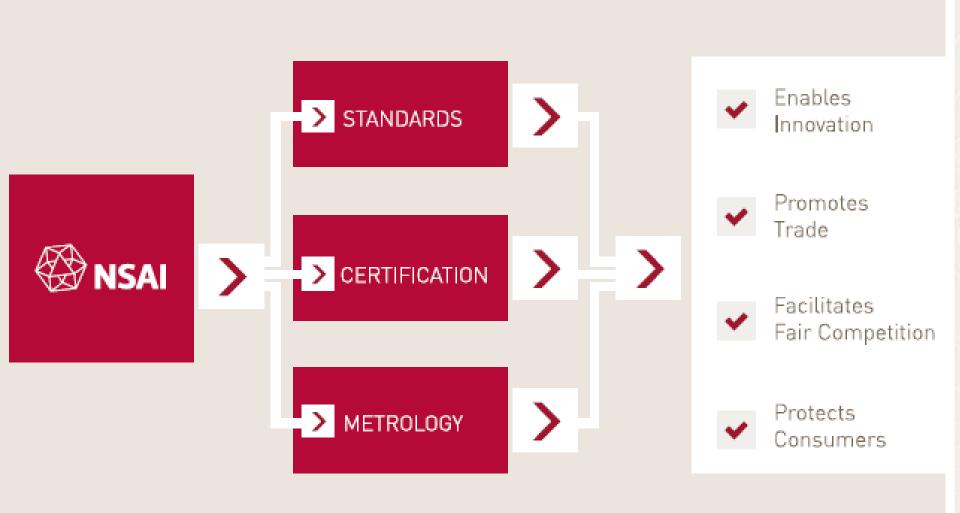
I.S.EN 13139:2013 - Aggregates for mortar

# **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.



6





#### **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

Agrement 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.



#### What are standards?

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



#### **Are Standards Mandatory?**

# 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



#### **Compulsory Safety National Standards**

#### **Irish Standard**

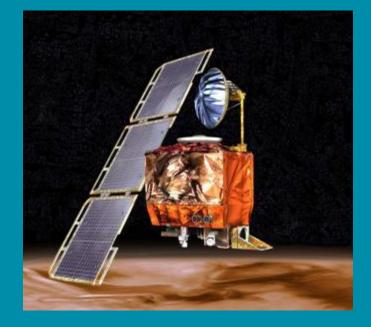
I.S. 148 Flammability and Labelling Requirements of Fabrics and Fabric Assemblies Used in Children's Nightwear

**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











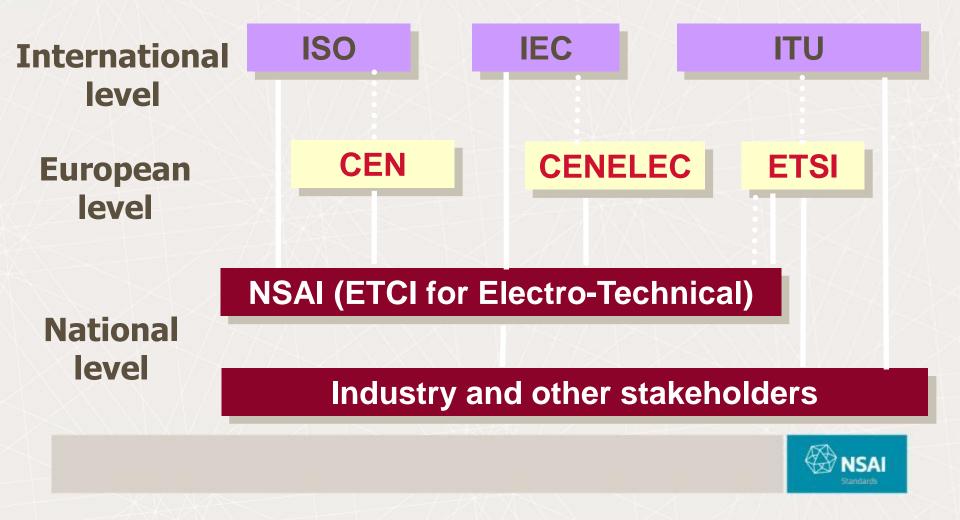








Standardisation towards the global level





#### Adoption of standards

#### 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.)National10/yearAdoptedEN's1500/year

**Other National publications** 

Standard Recommendation National Annex to EN's Swift



#### Standardisation Process: I.S. 398-1

Recommendation of Pyrite Panel report 2012 NSAI Board approval of project Notification

Call for participation from relevant interested parties



#### Standardisation Process: I.S. 398-1

Appointment of chairperson

Document drafted, consensus Public enquiry, comments resolution

Final editing Seal by minister, publish Notification Iris Oifigiuil

Five months start to publication



#### **Roads Standards Committee**

4 Working Groups National

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

**Road Equipment** 

**CEN TC 226** 



## CEN – European Standards Body

Members – 33 National Standards Bodies (NSB) NSB -one stop shop for all stakeholders

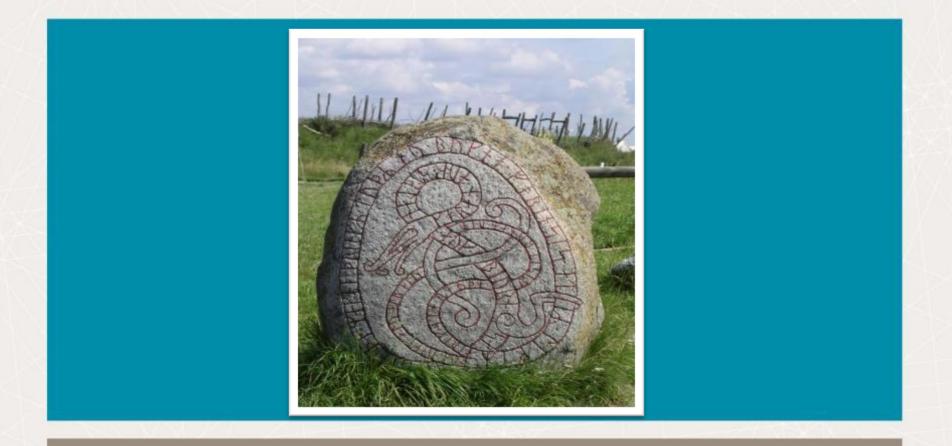
EN's public consultation prEN 5 months FprEN 2 months

Irish input/comments through NSAI

1100 Irish Experts



# Standards are not set in stone





# www.nsai.ie - online catalogue

#### 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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