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INSPECTIONS EDUCATION MARKET COMPLIANCE IS-BCMS
TRAINING SURVEILLANCE SUPPORT

#### **Executive Summary**

The Minister for Housing, Local Government & Heritage, Darragh O'Brien, requested the National Building Control & Market Surveillance Office (NBCMSO), in partnership with Donegal County Council (DCC) and with the support of Geological Survey Ireland (GSI), to carry out a market surveillance audit of all quarries in County Donegal.

The purpose of this audit was to evaluate relevant economic operators' compliance with the Construction Products Regulation<sup>1</sup> (CPR) when placing aggregate concrete blocks and/or aggregates for concrete on the market.

In response to this request, the NBCMSO, in partnership with DCC and with support from GSI, have requested relevant documentation, carried out site visits, commissioned laboratory testing and assessed quarries and masonry concrete block manufacturers in the County to assess the level of compliance with the CPR.

This process commenced in Q3 of 2021 following notification from National Standards Authority of Ireland of the withdrawal of a *Certificate of conformity of the factory production control (System 2+) for Aggregate Concrete Masonry Units in accordance with Annex ZA of I.S.EN 771-3* from a block manufacturer in the County.

It should be noted that the scope of this audit was limited to evaluating relevant economic operators' compliance with the CPR when placing aggregate concrete blocks and/or aggregates for concrete on the market. The audit aimed to evaluate that economic operators are complying with EN 12620:2002+A1:2008 - Aggregates for concrete and take into consideration the relevant national provisions S.R. 16:2016 Guidance on the use of I.S. EN 12620:2002+A1:2008 - Aggregates for Concrete. Geological Survey Ireland led the assessment of Aggregates for Concrete, by reviewing the economic operators' geological reports related to their knowledge of the raw material and putting in place a targeted sampling programme for aggregates for concrete being placed on the market/ or used in other concrete products and the results of the analysis and testing of said aggregates are tabulated in this report, refer to Table C4 and Appendix 4.

Formal and technical compliance with the requirements of the CPR for concrete blocks and aggregates for concrete being placed on the market by seventeen economic operators in Co. Donegal was checked as part of the audit and the results are tabulated in this report.

While the audit found that there were levels of non-compliance with the requirements of the CPR among the manufacturers/distributors in Donegal, the issues primarily related to errors in and omissions of the paperwork and generally did not reflect a concern with the tested performance of the actual product.

Concrete blocks were sampled from nine manufacturers in Co. Donegal and sent for testing to determine the level of technical compliance with I.S. EN 771-3: Specification for Masonry Units<sup>2</sup>. The results of the tests carried out show that all the concrete blocks sampled met the declared performance levels on the required technical documentation.

Formal corrective actions were required in relation to three economic operators. Two in respect of concrete blocks, and one in relation to aggregates. This involved adjustments to factory production control processes and/or recertification audits by the Notified Body with a view to bringing the products back into compliance with the CPR to the satisfaction of the Market Surveillance Authorities (NBCMSO and DCC) and GSI. The process of addressing these issues is ongoing by the economic operators.

<sup>&</sup>lt;sup>1</sup> The Construction Products Regulation (CPR) lays down harmonised rules for the marketing of construction products in the EU. The Regulation provides a common technical language to assess the performance of construction products. It ensures that reliable information is available to professionals, public authorities, and consumers, so they can compare the performance of products from different manufacturers in different countries.

<sup>&</sup>lt;sup>2</sup> I.S. EN 771-3:2011+A1: 2015. Specification for masonry units – Part 3: Aggregate concrete units (Dense and lightweight aggregates)

The report concludes with several Recommendations aimed at improving the levels of compliance with the CPR among Concrete Block manufacturers and the producers of Aggregates for use in Concrete.

These include strengthening the level of market surveillance activity by expanding on the 2021 proactive market surveillance inspection programme concentrated specifically on products from Area Code 24 (Aggregates); providing training for Market Surveillance Officers and Economic Operators to raise awareness of and increase compliance with the requirements of the CPR and making recommendations to the NSAI around issues/difficulties identified within the standards.

In addition, there are recommendations contained within the report of Geological Survey Ireland relating to further research required on the specific areas of mica and sulphide presence, in order to inform potential changes to the current standards and professional geologists' guidance. It should be noted that some of this research has already commenced with funding from DHGLH.

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#### Introduction

Minister for Housing, Local Government and Heritage Darragh O'Brien requested the National Building Control & Market Surveillance Office in partnership with Donegal County Council and with the support of Geological Survey Ireland, to carry out a market surveillance audit of all quarries in Co Donegal.

In accordance with Article 9 of the Market Surveillance Regulations, Market Surveillance Authorities may agree with other relevant authorities or bodies on the carrying out of joint activities that have the aim of promoting compliance, identifying non-compliance, raising awareness, and providing guidance in relation to the Union harmonisation legislation. In this regard, A Joint Activity Agreement (Appendix 2) was entered into by the National Building Control and Market Surveillance Office, the Donegal County Council and Geological Survey Ireland.

The purpose of this audit was to evaluate relevant "economic operators" compliance with the "Construction Products Regulation" (CPR) when placing aggregate concrete blocks and/or aggregates for concrete on the market.

This involved the evaluation, sampling, examination, testing and inspection of aggregate concrete blocks and/or aggregates for concrete in County Donegal for compliance with the CPR and the carrying out of risk assessments, where necessary. (Appendix 1 HLG 00484-21 Signed Letter-Minister)

This audit process commenced in Q3 of 2021 following notification from National Standards Authority of Ireland of the withdrawal of a *Certificate of conformity of the factory production control (System 2+) for Aggregate Concrete Masonry Units in accordance with Annex ZA of I.S. EN 771-3* from a block manufacturer in Donegal.

Relevant economic operators in Donegal were identified, written requests were issued seeking copies of CPR compliance documentation to assess formal compliance levels, while a programme of site visits and testing of both manufactured concrete blocks and aggregates used in the manufacture of blocks was initiated to determine levels of technical compliance. It should be noted that the scope of this audit was limited to evaluating relevant "economic operators" compliance with the "Construction Products Regulation" (CPR) when placing aggregate concrete blocks and/or aggregates for concrete on the market in Donegal. While much of the commentary on defective aggregate concrete blocks has centred around the presence of deleterious materials such as Mica, pyrrhotite etc, unless specified limits or performance criteria in relation to these are mentioned within a particular harmonised European Standard, they are outside the scope of market surveillance and are not part of this audit.

During this period, the National Building Control & Market Surveillance Office was implementing the National Market Surveillance campaign which was specifically aimed at construction products generated from quarries and pits. This campaign had a particular focus on:

- a. Aggregates for concrete (EN 12620),
- b. Bituminous mixtures (EN13043),
- c. Aggregate for mortar (EN13139),
- d. Unbound and hydraulically bound materials (EN 13242)

Commenced in 2021 this national campaign continued as part of the 2022 "National Market Surveillance Strategy for Ireland" ref, Appendix 4 National Market Surveillance Campaign 2021. To date, Market Surveillance has been carried out on 133 quarries across 27 Local Authorities. Economic operators have been visited, inspected and checks carried out for formal and technical compliance with the Construction Products Regulation.

While this report is specific to Donegal as requested by the Minister, the findings and learning outcomes are broadly in line with the National Market Surveillance Campaign.

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#### 1. Market surveillance of Construction Products Overview

#### 1.1 Construction Products Overview

The European Union (Construction Products) Regulations 2013 S.I. No. 225 of 2013, gives full effect in Irish law to the provisions set out in Regulation (EU) No. 305/2011 (Construction Products Regulation (CPR)) and specified provisions of Regulation (EU) No. 765/2008 (Market Surveillance Regulations). Furthermore Regulation (EU) 1020/2019 (Market Surveillance Regulations) repealed sections of Regulation (EU) No. 765/2008 and strengthened the provisions of Market Surveillance in Europe apply since 16<sup>th</sup> July 2021. Among other things Regulation (EU) 1020/2019 provides for a "Single liaison Office<sup>4</sup>" which represents the coordinated position of the market surveillance authorities and the authorities in charge of the control on products entering the Union market in Ireland; market surveillance of construction products is one part of this coordinated approach.

It is noted that S.I. No. 225 of 2013, the Construction Products Regulation (CPR); Market Surveillance Regulation (EU) No. 765/2008 and Regulation (EU) 1020/2019 should be read in tandem to obtain a complete view of the obligations on economic operators, the requirements for the marketing of construction products covered by the Construction Products Regulation and the market surveillance procedures to be followed and the powers conferred on Building Control Authorities who are Market Surveillance Authorities.

Furthermore, it is noted that the primary purpose of the Construction Products Regulation is to break down technical barriers to trade to ensure the free movement of construction products across Member States within the European Union. It does this by harmonising those elements which previously led to barriers to trade. In this regard, the Construction Products Regulation provides for:

- a system of harmonised technical specifications (over 450 harmonised European standards for construction products (hENs) are currently in force)
- an agreed system of attestation of conformity and verification of constancy for each product family (as set out in the harmonised technical specifications),
- a framework of notified bodies, and
- the mandatory CE marking of construction products as a passport to the internal market.

The Construction Products Regulation came into force across the entire European Union on the 1<sup>st</sup> of July 2013 with the result that each construction product for which a harmonised European Standard (known as a hEN) or a

<sup>&</sup>lt;sup>3</sup> Regulation (EU) 2019/1020 of the European Parliament and of the Council of 20 June 2019 on market surveillance and compliance of products and amending Directive 2004/42/EC and Regulations (EC) No 765/2008 and (EU) No 305/2011

<sup>&</sup>lt;sup>4</sup> The Department of Enterprise, Trade and Employment is the Single Liaison Office under Article 10 of Regulation 2019/1020. Coordination and cooperation mechanisms between national market surveillance authorities is through the Department of Enterprise, Trade and Employment who established a national Market Surveillance Forum (MSF) in May 2009. Represented at the Forum are Government Departments responsible for Union harmonisation legislation, market surveillance authorities, Revenue's Customs Service, and the Irish National Accreditation Board (INAB).

European Technical Assessment (known as an ETA) is in force required a Declaration of Performance (DOP) and CE mark affixed to the product before it can be placed on market in the European Union.

In essence all Construction Products the subject of a hEN or an ETA placed on the market, must be accompanied by affixing to the product the following:

- 1. A copy of the CE Marking.
- 2. A valid Declaration of Performance (DoP)
- 3. The instructions and safety information relating to the product.

A sample CE Marking and Declaration of Performance is given in "A Guide to the marketing and use of Aggregate Concrete Blocks to EN 771-3 in Ireland<sup>5</sup>"

CPR applies to construction products the essential characteristics of which are laid down in harmonised technical specifications in relation to the basic requirements for construction works as set out in <a href="Annex I to Construction">Annex I to Construction</a>
<a href="Products Regulation">Products Regulation</a>. Harmonised technical specifications include harmonised European product standards and European Assessment Documents (i.e., voluntary route to CE marking for innovative products). Construction products which are not covered by a harmonised technical specification are outside the scope of CPR.

#### 1.2 Market Surveillance Overview

In the context of construction products, market surveillance refers to the activities carried out and the measures taken by Market Surveillance Authorities to ensure that construction products comply with the requirements set out in the Construction Products Regulation and therefore do not endanger the health, safety, or any other aspect of public interest protection.

Building Control Authorities are designated as the principal Market Surveillance Authorities for construction products that fall within the scope of the Construction Products Regulation. Ref, <u>Appendix 3 for Building Control</u> & Market Surveillance responsibilities.

All Building Control Authorities have appointed authorised officers under Regulation 11 of the European Union (Construction Products) Regulations 2013. These authorised officers have wide-ranging powers set out in Regulations 12 to 14 to enter onto enter premises, for the purpose of inspections, sampling, requesting compliance information etc.

Market surveillance activities may be carried out proactively, on the Market Surveillance Authority's initiative, or reactively, following accidents, complaints or other intelligence requiring investigation. Formal market surveillance measures can only be addressed once a product has been placed on the market. However, Market Surveillance Authorities may also encourage compliance by providing information on applicable legislation (e.g., via press releases, dedicated websites, or information campaigns) at any stage of the design and production process and carry out checks at trade shows fairs and exhibitions.

It is important to note that "given the commercial sensitivities that may be involved, it is incumbent on all Market Surveillance authorities to take reasonable measures to guarantee the confidentiality of the technical documentation and such other information as may be supplied by an economic operator under these regulations in support of a product's compliance".

#### 2. Compliance Assessment under the Construction Products Regulation Overview

It is the responsibility of the Economic Operators, according to their respective role in the supply chain, to ensure compliance with all relevant legislation and to fulfil all appropriate conformity assessment obligations.

Market Surveillance Authorities are required to perform appropriate checks on the characteristics of products on an adequate scale, by means of documentary checks and, where appropriate, physical and laboratory checks and

<sup>&</sup>lt;sup>5</sup> https://www.gov.ie/en/publication/45415-a-guide-to-the-marketing-and-use-of-aggregate-concrete-blocks-to-en-771-3-in-ireland/

when doing so shall take account of established principles of risk assessment, complaints and other information including the national market surveillance strategy. Where economic operators present test reports or certificates attesting conformity issued by an accredited conformity assessment body, market surveillance authorities shall take due account of such reports or certificates. However, the Market Surveillance Authority does not and should not issue a compliance statement which may be seen as endorsing a product. When assessing the compliance of a construction product, the Market Surveillance Authority may choose to consider all relevant legislative requirements (a full compliance assessment) or parts of them (a partial compliance assessment). The compliance assessment may be divided between 'Formal' compliance (administrative requirements e.g., documentation, markings, etc.) and 'Technical' compliance (essential characteristics requirements).

The compliance assessment methodology used in this audit is set out below.

#### 2.1 Formal Compliance

During the inspection, the Market Surveillance Officer checks for compliance with the Regulation (EU) No. 305/2011 and the European Union (Construction Products) Regulations 2013, i.e., is the CE mark displayed on the construction product under inspection, is there a Declaration of Performance, are the instructions and safety information provided in the English language (or in a diagrammatic format that is readily understandable).

The following must be available and fixed to the construction product:

Formal Compliance Requirem	nents (minimum)	
·	RATION OF PERFORMANCE AND CE MARKING  CE Marking	https://eur-lex.europa.eu/legal- content/EN/TXT/?uri=celex%3A32011R0305 Safety Information in Use
Unique identification code of the product- type  Date of the declaration of performance  Name and address of the manufacturer details	Is the CE marking followed by the two last digits of the year in which it was first affixed  Name and address of the manufacturer details  Unique identification code of the product-type	When making a construction product available on the market, manufacturers/importers/distribut ers shall ensure that the product is accompanied by instructions and
Is there a reference number of the declaration of performance (DoP)?  Is the declared performance in accordance with Annex ZA of the harmonised standard)	Is there a reference number of the declaration of performance (DoP) Is there a reference to the harmonised specification	safety information in a language determined by the Member State concerned which can be easily understood by users.
Is there a reference to the harmonised specification Identification number of the notified body	Is there an identification number of the notified body Is the intended use available	
System of AVCP Which AVCP system is applied Is the intended use available		
'CE marking' shall mean a marking by whice requirements set out in Community harmon construction products for which the manufalf a declaration of performance has not been	the the manufacturer indicates that the product is in this the manufacturer indicates that the product is in the consistency of the Claustion of the commence of the commence of the commence of the commence of the manufacturer shall assume responsibility for the manufacturer shall assume responsibility for the commence.	E marking should be affixed to all in accordance with this Regulation.

construction product with such declared performance. In the absence of objective indications to the contrary, Member States

shall presume the declaration of performance drawn up by the manufacturer to be accurate and reliable.

Figure 1 Formal CPR Compliance Minimum Checks

Article 59 of Regulation 305/2011 prescribes the requirements for "formal non-compliance" and requires that where a Member State makes one of the following findings, it shall require the relevant economic operator to put an end to the non-compliance concerned, i.e., the CE marking has been affixed in breach of Article 8 or 9; or the CE marking has not been affixed, when required, in accordance with Article 8(2); and/or the declaration of performance has not been drawn up, when required, in accordance with Article 4; or the declaration of performance has not been drawn up in accordance with Articles 4, 6 and 7; and/or the technical documentation is either not available or not complete.

Information requests issued to the economic operators (ref, <u>Appendix 2 Joint Activity Agreement</u>), collating information returned, quality and details poor.

#### 2.2 Technical Compliance

It is noted that the CE marking enables construction products to move across all EU Member States, avoiding new assessments and certifications. Accompanying the product, the copy of the Declaration of Performance (DoP) provides information on the performance obtained using the assessment methods provided by the applicable harmonised technical specification (harmonised standards or European Assessment Documents).

Construction products may have a very different intended use in buildings or civil engineering works and may have to fulfil different performance requirements. Therefore, a responsibility rests with project designer/end user to correctly prescribe the product to be used in the specific construction project and to the end user to purchase the product with the prescribed performance for the specific intended use<sup>6</sup>.

In other words, the end user must check the CE marking, the DoP and the Safety information in use to ensure that the "construction product" is fit for the intended use in the conditions in which it has to be used; refer to the <u>A Guide to the marketing and use of Aggregate Concrete Blocks to EN 771-3 in Ireland</u>, which clearly outlines the responsibilities for manufacturers, importers, distributors, specifiers, designers, builders, certifiers and end users. It is also important to understand that these construction products in use, must comply with the requirements of the building regulations. Responsibility for compliance with the requirements of the Building Regulations rests with the designers, builders, and owners of buildings.

#### 2.3 Essential characteristics

A manufacturer shall declare the performance of at least one essential characteristic (Article 6(3)(c) of the CPR)

When deciding upon this, the economic operator shall take into consideration the national provisions (i.e., the Irish Standard Recommendations (SR) and National Annexes) in place in relation to the intended uses of the product where they intend it to be made available on the market. The following National provisions i.e., Standard Recommendations relate to aggregates and aggregate concrete blocks are listed below:

- a. <u>S.R. 16</u> provides National guidance on the use of I.S. EN 12620:2002+A1:2008 which specifies the properties of aggregates and filler aggregates obtained by processing natural, manufactured, or recycled materials and mixtures of these aggregates for use in concrete (this includes concrete in conformity with <u>EN 206-1</u> (ready-mix), concrete used in roads and other pavements and for use in precast concrete products etc (includes aggregate concrete blocks).
- b. <u>S.R. 17</u>, provides National guidance on the use of I.S. EN 13043:2002 in Ireland. It specifies the properties of aggregates and filler aggregates obtained by processing natural, manufactured, or recycled materials for use in bituminous mixtures and surface treatments for roads, airfields, and other trafficked areas, (this includes bituminous mixtures and surface treatments for roads, airfields, macadams, asphalts, surface dressing, and other trafficked areas etc).
- c. <u>S.R. 21</u>, 2014+A1:2016, provides National guidance on the use of I.S. EN 13242:2002+A1:2007 in Ireland i.e., (this includes, aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction, i.e., aggregates for use in pipe bedding, haunching, backfilling of filter drains, general fill material, unbound sub-bases for road pavements, unbound granular material (hardcore) for use under concrete roads and footpaths).
- d. <u>S.R. 18</u>, provides guidance on the use of I.S. EN 13139:2002 in Ireland (i.e., Natural aggregates used to make masonry mortar, plastering/rendering, and floor screeds in Ireland. It does not include guidance on the use of manufactured or recycled aggregates or for special bedding materials, repair mortar or grouts).
- e. <u>S.R. 325:2013+A2:2018/AC:2019</u> provides current recommendations for the design of masonry structures in Ireland to Eurocode 6 i.e., this Standard Recommendation contains non-contradictory complementary information as guidance material for the use in Ireland of the following EN Eurocode 6 series of standards I.S. EN 1996-1 1, I.S. EN 1996-1-2 and I.S. EN 1996-2 and masonry structures include the use of aggregate

<sup>&</sup>lt;sup>6</sup> https://single-market-economy.ec.europa.eu/sectors/construction/construction-products-regulation-cpr/frequently-asked-questions en#:~:text=the%20CE%20marking%20enables,the%20specific%20intended%20use.

concrete blocks in construction (including the use of aggregate concrete blocks to "EN 771-3 Specification for masonry units - Part 3: Aggregate concrete masonry units (Dense and lightweight aggregates" used in construction).

Each individual construction product, manufactured to a Harmonised European Standard has a specified threshold level of performance for a given essential characteristic of the product. The manufacturer must ensure that the performance of their product meets the threshold levels listed in <a href="mailto:Annex ZA of each harmonised">Annex ZA of each harmonised</a> standard.

Also, Member States are expected to align their provisions for building and civil engineering works abiding by the essential characteristics in Annex ZA relevant for their requirements.

A product is defined as a construction product in the meaning of the CPR if it is a product or kit which is produced and placed on the market for incorporation in a permanent manner in construction works (buildings or any civil engineering works) or parts thereof and the performance of which has an effect on the performance of the construction works with respect to the basic requirements for construction works<sup>7</sup>.

#### 3. Audit Methodology

The approach to the audit followed the methodology as set out in European Commission guidance document <u>Good practice for Market Surveillance</u><sup>8</sup> i.e., a programme of targeting, inspections & sampling, compliance assessment and follow-up actions and measures with the following actions carried out:

- i. Identifying "economic operators (EO)" block manufacturers and related manufacturers, importers, and distributers.
- ii. Register information on the audit activity in the <u>ICSMS</u><sup>9</sup> (including each inspection separately).
- iii. Assessment of compliance with formal requirements of CPR (DoP, FPC, CE Marking, Safety Information in Use etc.)
  - Information Note circulated to each EO with a; Request for documents, i.e., information under regulation 12(3) of the European Union (Construction Products) Regulations 2013. ref, Joint Activity Agreement <u>Appendix 2</u>
- iv. Assessment of compliance with technical requirements of CPR.
  - a. Inspection and Sampling of the quarried deposits/aggregates used as constituent ingredients in the manufacture of the concrete products undertaken by Geological Survey Ireland.
  - b. Inspection and Sampling of aggregate concrete blocks by the National Building Control & Market Surveillance Office/Donegal County Council.
  - c. Laboratory testing arranged by the National Building Control & Market Surveillance Office/Donegal County Council on the aggregate concrete blocks samples, included, where identified as being necessary by risk assessment, a visual assessment of the constituent aggregate (Ref: Test Suite A report to I.S. 465:2018) to establish the correlation with Item (b).
- v. Corrective action where required including follow-up inspections and sampling.
- vi. Complete information in ICSMS
- vii. Close out or Follow-up measures.

Each economic operator was inspected, and product sample taken for testing, and requested to provide compliance documentation, with the GSI also providing technical assistance in the constituent aggregate evaluation, inspection, and sampling.

<sup>&</sup>lt;sup>7</sup> The 7 basic requirements for construction works are: 1. Mechanical resistance and stability; 2. Safety in case of fire

<sup>3.</sup> Hygiene, health and the environment; 4. Safety and accessibility in use; 5. Protection against noise; 6. Energy economy and heat retention; 7. Sustainable use of natural resources.

<sup>8</sup> https://ec.europa.eu/docsroom/documents/23041

<sup>&</sup>lt;sup>9</sup> <a href="https://webgate.ec.europa.eu/icsms/">https://webgate.ec.europa.eu/icsms/</a> ICSMS (Information and Communication System for Market Surveillance) is the comprehensive communication platform for market surveillance on non-food products and for mutual recognition for goods. ICSMS is also an intelligence mechanism for the reliable exchange of information among authorities.

The campaign findings are tabulated in the Joint Activity Agreement in <u>Appendix 2</u> of this report which should be read in conjunction with the report submitted by GSI in <u>Appendix 3</u>.

#### 4. Summary Audit Findings

The recommendation by the Minister to carry out an audit has been a worthwhile and welcome exercise for the industry as a whole as it has highlighted that further work needs to be done not just in Donegal but in the rest of the state.

This audit will now form the basis of the National Market Surveillance Strategy going forward. Whilst the audit in Donegal was specifically aimed at products Area Code 24 of Annex 4 of the Construction Product Regulations, it has provided the basis of established procedures and collaboration that can be used for the market surveillance of all construction products containing aggregates as a constituent material in the state and has highlighted the importance of Competent authorities working with market surveillance authorities. It has also provided the framework to develop a database of quarries/economic operators who are placing construction products the source of which is aggregates from quarries and pits on the market (Area Code 24). This database will be shared with the Market Surveillance stakeholders.

There was good engagement with Market Surveillance Authorities and "economic operators". It is important that this market surveillance "Area Code 24-aggregates" programme is continued/incorporated into future National Market Surveillance programmes of planned announced/unannounced inspections.

As the National Market Surveillance Authority (prescribed in 2021) with lead responsibility for Market Surveillance of Construction Products within the state, this work will inform Market Surveillance going forward and we will put in place actions to implement all the recommendations in this report within our remit and engage with stakeholders as required on issues that are outside our remit. It is estimated that this will be in the order of a two-to-five-year programme in the table below.

#### 5. Conclusions and Recommendations

The aim of this joint activity was to:

- Promote compliance
- Identify non-compliances
- Raise awareness
- Provide guidance in relation to the Union harmonisation legislation

Programme Category	Description- Recommendation Item	Action by
PROMOTING COMPLI	ANCE.	
Recommendation 1	Recommendation 1-Incorporate "Area Code 24 Aggregates" Market	31 MSAs
	Surveillance Planned Market Surveillance Campaign into 2022 National	NBCMSO and assisted
	CPR Market Surveillance Strategy.	by GSI & TII.
Recommendation 7	Recommendation 7- National Quarry Register-Coordinated and	DHLGH, GSI
	Integrated Approach to Regulation of quarries in Ireland.	
IDENTIFYING NON-CO	DMPLIANCES.	
Recommendation 4	Recommendation 4-ProperlyResourced Market Surveillance Authorities,	DHLGH/CCMA/NOAC
	with agreed NOAC Service Indicators.	
Recommendation 3	Recommendation 3-Requirement for Training for Economic Operators	Industry, Notified
		Bodies, MSAs,
RAISING AWARENESS		
Recommendation 6	Recommendation 6- Promotion of the Adoption of S.R.	NBCMSO
	325:2013+A2:2018/AC:2019, RECOMMENDATIONS FOR THE DESIGN OF	DHLGH, Notified
	MASONRY STRUCTURES IN IRELAND TO EUROCODE 6 & A Guide to the	Bodies, Industry,
	marketing and use of Aggregate Concrete Blocks to EN 771-3 in Ireland	Professional Bodies,

Programme Category	Description- Recommendation Item	Action by
Recommendation 5	Recommendation 5 - Mandatory Building Regulatory Compliance Requests	DHPLG, 31 BCAs
	for Main Structural Elements (CPR Product Area 24)	NBCMSO
PROVIDING GUIDANO	CE IN RELATION TO THE UNION HARMONISATION LEGISLATION.	
Recommendation 2	Recommendation 2- Requirement for Training and upskilling of Market	NBCMSO, 31 MSAs,
	Surveillance Authorised Officers under Construction Production	DHPLG, 3 <sup>rd</sup> Level
	Regulations	Institutions

Table 1 Summary Implementation Programme of Recommendations

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## 6. Appendix 1 Minister's Request for Audit of Donegal Quarries

An Roinn Tithíochta, Rialtais Áitiúil agus Oidhreachta Department of Housing, Local Government and Heritage





Ms. Mairead Phelan Mairead.phelan@nbco.gov.ie

Dear Mr. Shakespeare & Ms. Phelan,

On foot of the withdrawal of a Certificate of conformity of the Factory Production Control for Aggregate Concrete Masonry Units from a manufacturer in Co. Donegal by National Standards Authority of Ireland in October of this year, I requested the National Building Control & Market Surveillance Office in partnership with Donegal County Council and with the support of Geological Survey Ireland, to carry out a market surveillance audit of all quarries in Co Donegal.

The purpose of this audit is to evaluate relevant economic operators' compliance with the Construction Products Regulation<sup>1</sup> (CPR) when placing aggregate concrete blocks and/or aggregates for concrete on the market.

This involves the evaluation, sampling, examination, testing and inspection of aggregate concrete blocks and/or aggregates for concrete in County Donegal for compliance with the CPR and the carrying out of risk assessments, where necessary.

I understand that significant progress has been made on this audit to date and I would like to take this opportunity to thank the National Building Control & Market Surveillance Office, Donegal County Council and Geological Survey Ireland for the prompt, collaborative and proactive approach.

I am interested in the findings of this work and would be grateful if you could provide an interim report on the audit in January 2022 and a final report in March 2022.

https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:088:0005:0043:EN:PDF

Olfig an Aire Tithfochta, Rialtais Áitiúil agus Oldreachta Office of the Minister for Housing, Local Government and Heritage Teach an Chustairn, Baile Átha Clieth, D01 W680
Custom House, Dublin, D01 W680
T+353 1888 2403 | minister@housing.gov.ie
www.gov.le/housing



In that regard and to assist in your reporting of the results of the audit, please find attached a template report, setting out

- the joint activity agreement in accordance with Article 9 Joint activities to promote compliance of Market Surveillance Regulation EU 2019/1020,
- · the detailed scope and methodology of the audit, and
- a format for presenting the findings and any further conclusions.

My Department remains available to assist you with technical support, or requests for further information from notified bodies, as required (See Section 4 of GNB CPR Position Paper 'Communication between Notified Bodies and Market Surveillance authorities' attached).

I look forward to receiving your report on this issue in due course.

Yours sincerel

Darragh O Brien, TD,

Minister for Housing, Local Government and Heritage.

ce: John Mc Laughlin - CEO Donegal Co. Co. Paddy Mullen, Donegal Co. Co. Koen Verbruggen, GSI

#### 7. Appendix 2 Joint Activity Agreement

Governing a joint activity to promote compliance subject to article 9 of Regulation (EU) 2019/102010

# Report of the Market Surveillance Campaign of County Donegal Quarries

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## A. Joint activity agreement

Governing a joint activity to promote compliance subject to article 9 of Regulation (EU) 2019/102011

Article 9 of Regulation (EU) 2019/1020, entered into force in the EU on the 16 July 2021, and provides for Joint activities to promote compliance with the requirements of the Construction Products Regulations<sup>12</sup> (CPR). The agreement and any results of the joint activity must be entered in the Information Communication System for Market Surveillance (ICSMS), in accordance with Article 34 of these regulations. The purpose of carrying out joint activities is to promote compliance, identify non-compliance<sup>13</sup>, raise awareness and providing guidance in relation to the Union's harmonisation legislation with respect to specific categories of products, in particular categories of products that are often found to present a serious risk, including products offered for sale online. It is important to ensure that the agreement on joint activities does not lead to unfair competition between economic operators and does not affect the objectivity, independence, and impartiality of the parties.

A market surveillance authority<sup>14</sup> may use any information resulting from joint activities carried out as part of any investigation regarding non-compliance that it undertakes. Market surveillance authorities shall exercise their powers and carry out their duties independently, impartially and without bias. Ref, Regulation (EU) 2019/1020.

It is noted that the "exchange of information between market surveillance authorities, and the use of evidence and investigation findings should respect the principle of confidentiality. Information should be handled in accordance with applicable national law, in order to ensure that investigations are not compromised and that the reputation of the "economic operator" is not prejudiced" reg, Regulation (EU) 2019/1020.

#### Name of the joint activity: Market Surveillance Campaign of County Donegal Quarries

<sup>&</sup>lt;sup>10</sup> The Joint Activity Agreement template should be agreed with respective parties participating in the campaign; uploaded on the Information Communication System for Market Surveillance (ICSMS); and should be transmitted by the leading market surveillance authority to the Network for information and possible remarks.

<sup>&</sup>lt;sup>11</sup> The Joint Activity Agreement template should be agreed with respective parties participating in the campaign; uploaded on the Information Communication System for Market Surveillance (ICSMS); and should be transmitted by the leading market surveillance authority to the Network for information and possible remarks.

<sup>&</sup>lt;sup>12</sup> Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 laying down harmonised conditions for the marketing of construction products and repealing Council Directive 89/106/EEC.

<sup>&</sup>lt;sup>13</sup> 'non-compliance' means any failure to comply with any requirement under the Union harmonisation legislation or <u>under Regulation EU</u> 2019/1020 on market surveillance and compliance of products and amending Directive 2004/42/EC and Regulations (EC) No 765/2008 and (EU) No 305/2011.

<sup>14 &#</sup>x27;Market surveillance' means the activities carried out and measures taken by market surveillance authorities to ensure that products comply with the requirements set out in the applicable Union harmonisation legislation and to ensure protection of the public interest covered by that legislation;" ) "Market surveillance authorities act in the interest of economic operators, of end users, and of the public,...and exercise their powers in accordance with the principle of proportionality."

<sup>&</sup>lt;sup>15</sup> 'Economic operator' means the manufacturer, the authorised representative, the importer, the distributor, the fulfilment service provider or any other natural or legal person who is subject to obligations in relation to the manufacture of products, making them available on the market or putting them into service in accordance with the relevant Union harmonisation legislation.

The joint activity will focus on manufacturers of aggregate concrete blocks and/or aggregates for concrete products within the scope of the Construction Products Regulation.

Unique number/code: HLG 00484-21

## 1. Participants

**Market Surveillance Authorities Contact persons** Legal Market Surveillance Authority (leading): Dublin City Name: Mairead Phelan/Richard Council Butler/Ronan Glynn Post address: Function: Competent Authority for the National Building Control & Market Surveillance purposes of carrying out the functions of a Office Market Surveillance Authority. Floor 1, 3 Palace St, Dublin, D02 T277 Phone number: 01 22 27 947/794 E-mail address: support@nbco.gov.ie Legal name: Donegal County Council Name: Paddy Mullen Post address: Function: Authorised Officer Donegal County Council, Building Control Office, Phone number: Letterkenny Public Services Centre, E-mail address: Blaney Road, Letterkenny, Co. Donegal BuildingControl@Donegalcoco.ie Other Relevant Authorities (Competent National Authorities) **Contact persons** Legal name: Department of the Environment, Climate, and Name: Koen Verbruggen/Eoin McGrath Communications Function: Competent Body for Aggregates Post address: Phone number: 01 678 2896 **Geological Survey Ireland** E-mail address: eoin.mcgrath@gsi.ie Beggars Bush, Haddington Road, Dublin, D04 K7X4 Koen.verbruggen@gsi.ie

#### 2. Aims, justification, motivation, and scope of the joint activity

#### **Aim of the joint activity** (Check the appropriate box(es)

- ☑ Providing guidance in relation to the Union harmonisation legislation

#### Justification and motivation:

Ireland's National market surveillance programme 2021<sup>16</sup> is published on the website of the European Commission. Section 2.5 provides specific details on the market surveillance of construction products<sup>17</sup>. The 2021 Programme outlines a market surveillance campaign led by "Dublin City Council - National Building Control & Market Surveillance Office", to perform risk assessments of selected quarrying and pit operations, follow-up inspections, sampling and testing as appropriate to ensure compliance with the Construction Products Regulations (CPR). Geological Survey Ireland (GSI) as a Competent National Authority is providing technical assistance and expertise to this campaign. The "National Market Surveillance Strategy 2022 Ireland" section 3.4 outlines the commitment to continue with and expand on the 2021 proactive market surveillance inspection programme concentrated on construction products generated by economic operators

<sup>16</sup> Pursuant to Article 18(5) of Regulation (EC) 765/2008, Ireland's <u>National market surveillance programme 2021</u> as published on the website of the European Commission.

<sup>&</sup>lt;sup>17</sup> 'Construction product' means any product or kit which is produced and placed on the market for incorporation in a permanent manner in construction works or parts thereof and the performance of which has an effect on the performance of the construction works with respect to the basic requirements for construction works.

<sup>&</sup>lt;sup>18</sup> National Market Surveillance Strategy coordinated by the Single Liaison Office in line with Article 13 of Regulation 2019/1020 which requires Member States to draw up an overarching national market surveillance strategy, at least every four years.

from quarries and pits, specifically products from Area Code 24 (Aggregates) of the CPR focusing on aggregates for Concrete and underfloor fill.

On 15<sup>th</sup> October 2021, the National Standards Authority of Ireland (NSAI) advised the Department of Housing, Local Government and Heritage that NSAI had withdrawn a certificate of conformity of factory production control<sup>19</sup> relating to the manufacture<sup>20</sup> of aggregate concrete blocks (EN 771-3) by a manufacturer based in County Donegal.

After examining the materials being used in the manufacture of the blocks, NSAI could no longer be satisfied that the Factory Production Control could deliver a product of consistent quality and had therefore withdrawn the certificate.

Given the issues of defective concrete blocks in County Donegal (ref, the Report of the Expert Panel on Concrete Blocks<sup>21</sup>), the impact this has had on houses and the State's role in providing a grant scheme to assist Donegal homeowners whose homes have been damaged due to the use of defective concrete blocks, the Minister for Housing, Local Government and Heritage requested an audit of all quarries in County Donegal, to evaluate relevant economic operators' compliance with the Construction Products Regulations (CPR) when placing relevant construction products (aggregates, aggregates for concrete blocks and/or aggregates of use in concrete products) on the market.

The learnings from this audit will be extended nationally under the National Market Surveillance Programme.

#### Scope:

The scope of this audit involves the evaluation, sampling, examination, testing, and inspection of aggregate concrete blocks and/or aggregates for concrete in County Donegal for compliance with the <u>Construction</u> <u>Products Regulations</u> (CPR) and carrying out, where necessary, risk<sup>22</sup> assessments. An assessment of compliance with the following will be undertaken:

- The relevant harmonised European standards for this joint activity include:
  - EN 771-3:2011+A1:2015 Specification for masonry units. Aggregate concrete masonry units (Dense and light-weight aggregates) and,
  - o EN 12620:2002+A1:2008 Aggregates for concrete.
- The relevant National provisions (Standard Recommendations) published by NSAI include:
  - S.R. 325:2013+A2:2018/AC:2019 Recommendations for the design of masonry structures in Ireland to Eurocode 6. (Note: Reference, recommendation sent to NSAI Masonry Panel)
  - S.R. 16:2016 Guidance on the use of I.S. EN 12620:2002+A1:2008 Aggregates for concrete.
- The manufacturers' knowledge of the raw material (as is legally required by the CPR via the relevant harmonised European Standards) and having regard to the end product's suitability for use in construction works in accordance with the relevant Standard Recommendations published by NSAI.
- The Declaration of Performance and CE marking<sup>23</sup> of the relevant construction products the Economic Operator is placing on the market.
- Technical documentation on manufacturer's website.

<sup>&</sup>lt;sup>19</sup> 'factory production control' (FPC) means the documented, permanent and internal control of production in a factory, in accordance with the relevant harmonised technical specifications; Article 2 Regulation (EU) 305/2011. Any product manufactured to the requirements of a harmonised European standard (hEN) and placed on the market as such is subject to FPC and CE marking. These requirements are outlined in a number of annexes within that standard (hEN). FPC is the first stage of CE marking

<sup>&</sup>lt;sup>20</sup> 'manufacturer' means any natural or legal person who manufactures a product or has a product designed or manufactured and markets that product under its name or trademark.

<sup>21</sup> https://www.gov.ie/en/publication/0218f-report-of-the-expert-panel-on-concrete-blocks/

<sup>22 &#</sup>x27;risk' means the combination of the probability of an occurrence of a hazard causing harm and the degree of severity of that harm.

<sup>&</sup>lt;sup>23</sup> 'CE marking' shall mean a marking by which the manufacturer indicates that the product is in conformity with the applicable requirements set out in Community harmonisation legislation providing for its affixing; Regulation (EU) 765/2008. The CE marking should be affixed to all construction products for which the manufacturer has drawn up a Declaration of Performance (DoP). If a DoP has not been drawn up, the CE marking should not be affixed. To ensure that the DoP is accurate and reliable, the performance of the construction product should be assessed and the production in the factory should be controlled in accordance with an appropriate system of Assessment and Verification of Constancy of Performance (AVCP) of the construction product. For (AVCP) systems 3, 2+, 1 y 1+, reliability is supported by a notified body; For the value chain: the manufacturer assumes full responsibility regarding the Information declared.

• Safety information/documentation and use

The joint activity began in December 2021

#### Resources

Provider	Resource
Dublin City Council - National Building Control & Market Surveillance Office	Testing Laboratories and procurement of transport expertise and sampling equipment Staff, Travelling, Inspections and Sampling
Donegal County Council	Resources support for Inspections and Sampling
Geological Survey Ireland	Vehicles, expertise, and sampling equipment

### 3. Results and Information Sharing

All inspection activity relating to this campaign have been uploaded on the Information Communication System for Market Surveillance (ICSMS) and tagged with a unique campaign code. All compliance follow up inspections are/will also be uploaded on the ICSMS.

#### 4. Signatures

Parties Date Signature

#### Market surveillance authorities:

- Dublin City Council National Building Control & Market Surveillance Office
- Donegal County Council

#### Other relevant authorities:

Geological Survey Ireland

# B. Scope of campaign and methodology taken

Provide outline of the scope of the campaign (See Item 2. of the Joint Activity Agreement), and the methodology taken.

**Note:** Methodology should include the following:

- Sampling of the quarried deposit/aggregate which is used in the production of the aggregate concrete blocks should be carried out by Geological Survey Ireland, as part of any site visits arranged by the National Building Control & Market Surveillance Office.
- ii. Sampling of aggregate concrete blocks should be carried out by the National Building Control & Market Surveillance Office/Donegal County Council.
- iii. Laboratory testing arranged by the National Building Control & Market Surveillance Office/Donegal County Council on the aggregate concrete blocks samples should include a visual assessment of the constituent aggregate (Ref: Test Suite A report to I.S. 465:2018) to establish the correlation with Item i.

# C. Campaign Findings: Tables C1 - C5

# C1 - Campaign Findings - EN 771-3

Specification for masonry units - Part 3: Aggregate concrete masonry units (Dense and lightweight aggregates).

The campaign findings are reported in the tabulated format below. Refer to Table C4 & C5 Campaign Findings & Corrective Actions Taken	С	lightweight aggregates).															Total No.	
	Α	В	С	D	E	F	G	Н	ı	J	К	L	М	N	0	Р	Q	
Manufacturer ID Reference	3406	8453	8877	5796	1691	2709	6037	3951	9432	4010	5899	2740	2192	5141	3854	8061	2576	
On Site Inspection	✓	✓	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	✓	✓	<b>√</b>	<b>✓</b>	<b>√</b>	17						
Follow-up On Site inspections		✓				<b>√</b>	<b>√</b>									<b>√</b>		4
Manufacturer (M) Manufacturer In certification Process (MICP) Not a Manufacturer (NM)	М	NM	М	М	М	MICP	М	NM	NM	NM	NM	М	NM	М	NM	NM	М	9
Has the EO a Current Certificate of Factory Production Control (FPC) for Verification of Constancy of Performance AVCP 2+	<b>√</b>	X	<b>✓</b>	<b>✓</b>	<b>✓</b>	х	<b>√</b>	x	х	x	х	<b>√</b>	Х	<b>✓</b>	Х	Х	<b>√</b>	8
Technical Compliance —Evaluation  Tests performed in laboratories for verifying compliance with EN 771-3 Specification for masonry units - Part 3:  Aggregate concrete masonry units (Dense and lightweight aggregates).  *Tested as part of audit as part of Risk assessment	<b>√</b>	X	✓	<b>✓</b>	<b>✓</b>	<b>√</b> *	<b>✓</b>	X	X	x	x	✓	X	<b>✓</b>	X	X	<b>√</b>	9

The campaign findings are tabulated format below. R C4 & C5 Campaign Finding Actions Taken	efer to Table	Construction Product: EN 771-3 Specification for masonry units - Part 3: Aggregate concrete masonry units (Dense and lightweight aggregates).  (Anonymised)															Total No.		
		Α	В	С	D	E	F	G	Н	ı	J	K	L	M	N	0	P	Q	
Manufacturer ID Reference	ce	3406	8453	8877	5796	1691	2709	6037	3951	9432	4010	5899	2740	2192	5141	3854	8061	2576	
Essential Characteristic Testing for verifying compliance with EN 771-3 Specification for masonry units - Part 3: Aggregate concrete masonry units (Dense and lightweight aggregates).	Test Methods Standards EN 771-3 Specification for masonry units - Part 3: Aggregate concrete masonry units (Dense and lightweight aggregates).				EN	I 771-3	- Aggre	gate co	ncrete	mason	ry units	s (Dens	e) Samp	oles Test	ed				
Dimensional Tolerance	IS EN 772-16	✓		✓	✓	✓	✓	✓					✓		✓			✓	
Configuration Group 1 configuration allows for voids content ≤ 25%. There is a swell of opinion that this value is too high and affects long term durability	EN 1996-1-1	<b>√</b>		<b>√</b>	✓	<b>√</b>	<b>√</b>	<b>√</b>					✓		✓			<b>√</b>	
Gross/Net Density	IS EN 772-13	✓		✓	<b>√</b>	<b>√</b>	✓	<b>√</b>					<b>√</b>		<b>√</b>			✓	
Compressive Strength	IS EN 772-1	✓		✓	✓	<b>√</b>	<b>√</b>	✓					✓		✓			<b>√</b>	
Water absorption	IS EN 772-11	<b>√</b>		<b>√</b>	✓	<b>√</b>	<b>√</b>	<b>√</b>					<b>√</b>		<b>√</b>			<b>√</b>	
Moisture movement	IS EN 772-14	✓		✓	✓	<b>√</b>	<b>√</b>	✓					✓		✓			<b>✓</b>	
Shear Bond Strength  Shear bond strength is normally a tabulated value. Refer to EN988-2  Annex C & National Annex to EN 1996-1-1.	IS EN 998-2	<b>√</b>		<b>√</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>√</b>					<b>√</b>		<b>√</b>			<b>√</b>	
Flatness of bed faces	IS EN 772-20	<b>√</b>		<b>√</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>√</b>					<b>√</b>		<b>√</b>			<b>✓</b>	

The campaign findings are reported in the tabulated format below. Refer to Table C4 & C5 Campaign Findings & Corrective Actions Taken	Construction Product: EN 771-3 Specification for masonry units - Part 3: Aggregate concrete masonry units (Dense and lightweight aggregates).  (Anonymised)													lightweight aggregates).  (Anonymised)													
	Α	В	С	D	E	F	G	Н	ı	J	К	L	М	N	0	Р	Q										
Manufacturer ID Reference	3406	8453	8877	5796	1691	2709	6037	3951	9432	4010	5899	2740	2192	5141	3854	8061	2576										
Flatness of bed surface only required where masonry units are declared as tolerance category D4																											
Technical Compliance — Findings based on Tests performed in laboratories for verifying compliance with to EN 771-3 Specification for masonry units - Part 3: Aggregate concrete masonry units (Dense and lightweight aggregates).	It was r Shear B prescrib (Dense is in acc Require other th 16:2010 Summa EN 771 product complian It is the be awa require relevan manufo guide in	m <sup>2</sup> .  noted that sond Street in the cordance ements of the ements of th	at Dimenength, Flave harmone with the end or "Dura quires agree on the hical companies of S.R. 325 ements of importer gup a Do	sional To atness of nised Sta aggregate e require bility aga gregates e use of I pliance: , the har neir esse the end- ons of a D 5:2013+A f the Bui	plerance, bed face and ard Eles"). It was ments of a consiste free at the best of the consistency of the con	Configures all met N 771-3:: vas also ref EN 771- vze/thaw ol.S. EN 1 2620:200  standard racteristic read the fact to the fact	ration, Gritten, Grit	ross/Net ared per 2015, "S t the "in: A1:2015. Ilational F 02+A1:20   8 - Aggree the me e essential satisfy the aggregates for the eto the province of the province of the province of the eto eto eto eto eto eto eto eto eto et	Density, formance pecificate tended un pecificate tended un periodicate tended un periodicate tended un periodicate tended area tended area tended te	Comprese as set of ion for mase" in all series and end users and end a committee and end a committee and end end end end end end end end end e	ssive Street out on the cases was out in Taker out in Tak	ength, Wa e manufa enits - Par es "For us able 14 o ete and a r to C4 & assessing ed on the ruction par be construction par on the construction par on the construction par are construction	ater absorater absorater absorater absorater acturers of the second acturers of the perfect of the second acture actual a	orption, No DoP and regate colls, column of the second of	Moisture were with oncrete mans, and point the Guide onal providings.  The of the code of the code on the code of	movement hin the line asonry user artitions e, which, isions S.F. construct eated arend-user the comply with a line line line essential	ent, imits as units " which , among cion e and with the end for ial										

The campaign findings are reported in the tabulated format below. Refer to Table C4 & C5 Campaign Findings & Corrective Actions Taken	С	onstruc	tion Pro	duct: El	N 771-3	Specific		lightwei	nry units ght agginonymis	regates		gate co	ncrete n	nasonry	units (D	ense an	nd	Total No.
	Α	В	С	D	E	F	G	Н	I	J	К	L	М	N	0	Р	Q	
Manufacturer ID Reference	3406	8453	8877	5796	1691	2709	6037	3951	9432	4010	5899	2740	2192	5141	3854	8061	2576	
<b>Assessment of EO Construction Produc</b>	t for ve	rifying	compli	ance w	ith to E	N 771-	3 Specif	ication	for ma	sonry (	ınits - F	Part 3: A	Aggrega	te cond	rete m	asonry	units	
(Dense and lightweight aggregates) an	d findin	gs:																
Formal Compliance –Evaluation (admin	istrative	requir	ements	, docun	nentati	on, mai	kings, e	etc i.e. t	technico	al docui	mentati	ion or in	nformat	ion refe	erred to	in Artic	cles 4,	
5, 6, 7, 11, 12, 13, 14, 16, 36, 37 and 38	of the	Constru	ction Pi	roducts	Regula	tion (El	J) 305 (	of 2011	and Re	gulatio	ns 5, 6,	7 and 8	8 of <u>S.I.</u>	No. 225	of 201	3 - Euro	<u>opean</u>	
Union (Construction Products) Regulation	ons 201.	<u>3</u>																
Is the Declared of Performance (DoP) in					.,												.,	_
accordance with the <u>CPR</u> .	Х		Х	Х	Х	Х	Х					Х		ICP			Х	0
Are the CE Marking & Declared of																		
Performance (DoP) separate documents	1		<b>√</b>	<b>√</b>	<b>1</b>	Х	<b>√</b>					<b>1</b>		ICP			<b>1</b>	7
in accordance with the <u>CPR</u> .																		
Is there instructions and safety																		
information provided in accordance with	x		X	Х	Х	Х	Х					Х		ICP			Х	0
the <u>CPR</u> .																		
Had the Economic Operators details on										1	1							
the traceability procedures of their	Note The trace	ahility nro	redures hav	ie heen stri	enathened	hv MSO lia	sina with t	ne Econom	ic Onerator	and the N	ntified Rod	v as nart of	the Factor	v Control Pr	ncess			
Construction Products in accordance with	Marking	and tracea	bility															
the <u>CPR</u> .		esponsibilit nd characte		ınufacturer	or its repre	esentative t	o provide d	ınd keep co	mplete rec	ords about	individual <sub>l</sub>	products or	product bo	ntches inclu	ding their r	elevant pro	oduction	
			or batches (	and the rel	evant detai	ls of the pr	oduction sh	ould be ide	ntifiable ar	nd traceabl	е.							
Had the Economic Operators details of																		
Had the Economic Operators details of how their construction products are	Note The trace	ability pro	cedures hav	ie been stri	enathened	bv MSO lia	sina with t	ne Econom	ic Operator	and the N	otified Rod	v as part of	the Factor	v Control Pr	ocess			
identified /marked and stock control	Marking	and tracea	bility		ŭ	•			·		,		·					
procedures in accordance with the CPR.			cate the ma well as wit										aging or the			nercial docu	uments	

# C2 - Campaign Findings- I.S. EN 12620:2002+A1:2008 -

Aggregates for concrete and the relevant national provisions S.R. 16:2016 Guidance on the use of I.S. EN 12620:2002+A1:2008 - Aggregates for Concrete

The campaign findings are reported in the tabulated format below. Refer to Table C4 & C5 Campaign Findings & Corrective Actions Taken.	Con	structio	n Produ					N 1262		A1:200				nal proverete.	visions S	S.R. 16:2	016	Total No.
	Α	В	С	D	Е	F	G	Н	ı	J	К	L	М	N	0	Р	Q	
Manufacturer ID Reference	3406	8453	8877	5796	1691	2709	6037	3951	9432	4010	5899	2740	2192	5141	3854	8061	2576	
On Site Inspection	<b>√</b>	✓	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	✓	✓	✓	<b>√</b>	✓	<b>√</b>	✓	✓	✓	<b>√</b>	<b>√</b>	17
Follow-up On Site inspections		<b>√</b>				<b>√</b>	<b>√</b>									<b>√</b>		4
Manufacturer (M) Manufacturer In certification process (MICP) Manufacturing SR16 to Manufacture other Construction Products (MOCP) Buy in certified SR16 to Manufacture Construction Products (IM) Not a Manufacturer (NM)	IM	MICP	М	М	IM	IM	IM	М	М	IM	NM	IM	NM	МОСР	М	М	IM	M: 6
Has the EO a Current Certificates of Factory Production Control (FPC) and Verification of Constancy of Performance AVCP 2+		x	<b>✓</b>	<b>✓</b>				<b>✓</b>	✓						✓	<b>√</b>		6
Technical Compliance –Evaluation  Tests performed in laboratories for verifying compliance with to EN 12620:2002+A1:2008 - Aggregates for concrete and the relevant national provisions S.R. 16:2016 Guidance on the use of I.S. EN 12620:2002+A1:2008 - Aggregates for Concrete.		<b>/</b> *				<b>/</b> *	<b>/</b> *											3

The campaign findings are tabulated format below. Ro C4 & C5 Campaign Findings Actions Taken.	efer to Table	Construction Product: EN 12620:2002+A1:2008 - Aggregates for concrete and the relevant national provisions S.R. 16:2016 Guidance on the use of I.S. EN 12620:2002+A1:2008 - Aggregates for Concrete.  (Anonymised)												Tota No.					
		Α	В	С	D	E	F	G	Н	ı	J	К	L	М	N	0	Р	Q	
Manufacturer ID Reference	е	3406	8453	8877	5796	1691	2709	6037	3951	9432	4010	5899	2740	2192	5141	3854	8061	2576	
* All testing carried out by GSI unless	noted otherwise.																		
	Test Methods			•				•	1					•					
Essential Characteristic Tested to verifying compliance with to EN 12620:2002+A1:2008 - Aggregates for concrete and the relevant national provisions S.R. 16:2016 Guidance on the use of I.S. EN 12620:2002+A1:2008 - Aggregates for Concrete Samples Tested	EN 12620:2002+A1:2 008 - Aggregates for concrete and the relevant national provisions S.R. 16:2016 Guidance on the use of I.S. EN 12620:2002+A1:2 008 - Aggregates for Concrete Samples Tested	EN 126	520:2002	2+A1:20	008 - Agg						t nationa s for Cor	•			16 Guida	ance on	the use	e of I.S.	
Los Angeles coefficient	EN 1097-2		<b>√</b> *				<b>√</b> *	<b>√</b> *											3
Water Absorption & particle density	EN 1097-6		<b>/</b> *				<b>√</b> *	<b>√</b> *											3
Magnesium sulfate soundness	EN 1367-2		<b>√</b> *				<b>/</b> *	<b>√</b> *											3
Drying shrinkage	EN 1367-4		<b>√</b> *				<b>√</b> *	<b>√</b> *											3
Methylene Blue	EN 933-9		<b>√</b> *				<b>√</b> *	<b>/</b> *											3
Acid soluble sulfate	IS EN 1744-1		<b>√</b> *				<b>√</b> *	<b>√</b> *											3
Total sulfur	IS EN 1744-1		<b>√</b> *				<b>√</b> *	<b>√</b> *											3
Water soluble chloride	IS EN 1744-1		<b>√</b> *				<b>√</b> *	<b>√</b> *											3

The campaign findings are tabulated format below. Re C4 & C5 Campaign Findings Actions Taken.	efer to Table	Cons	structio	n Produ	ct: EN 1 Guid	<b>2620:20</b> ance on			N 1262		-A1:200				-	visions S	s.R. 16:2	2016	Total No.
		Α	В	С	D	E	F	G	Н	I	J	K	L	M	N	0	Р	Q	
Manufacturer ID Reference	e	3406	8453	8877	5796	1691	2709	6037	3951	9432	4010	5899	2740	2192	5141	3854	8061	2576	
Detailed thin section petrography			<b>/</b> *				<b>√</b> *	<b>√</b> *											3
Simplified Analysis								A	ggregate	e Sampl	es Teste	ed							
Evaluation of hand specime	en						<b>√</b> *		<b>√</b> *	<b>√</b> *						<b>√</b> *			4
Assessment of geological a petrographic reports in acc S.R. 16 to support suitability	cordance with	<b>√</b> *	<b>√</b> *				<b>√</b> *		<b>√</b> *	<b>√</b> *				<b>√</b> *	10				
Findings based on Tests performed in laboratories for verifying compliance with to EN 12620:2002+A1:2008 - Aggregates for concrete and the relevant national provisions SR 16.  Refer to Table C4 & C5 Campaign Findings & Corrective Actions Taken as well as GSI Report in Appendix 4.																			

Assessment of EO Construction Production provisions S.R. 16:2016 Guidance on the			-						_		e and th	e releva	ant nati	onal		
Formal Compliance –Evaluation (admin									_		informat	tion refe	erred to	in Arti	cles 4,	
5, 6, 7, 11, 12, 13, 14, 16, 36, 37 and 38	of the C	onstru	ction Pi	roducts	Regulation	(EU) 305	of 2011	and Regu	ılations 5,	6, 7 and	8 of <u>S.I.</u>	No. 225	of 201	3 - Eur	<u>opean</u>	
<u>Union (Construction Products) Regulation</u>	ons 2013	3														
Is the Declared of Performance <b>(DoP)</b> in accordance with the <u>CPR</u> .		х	х	х			х	Х					х	х		0
Are the CE Marking & Declared of Performance ( <b>DoP</b> ) separate documents in accordance with the <u>CPR</u> .		<b>√</b>	<b>✓</b>	<b>✓</b>			<b>✓</b>	х					х	Х		4
Is there instructions and safety information provided in accordance with the <u>CPR</u> .		х	х	х			х	<b>✓</b>					х	х		1
Had the Economic Operators details on the traceability procedures of their Construction Products in accordance with the <u>CPR</u> .	Marking a It is the re details an	and traceal sponsibility d characte	bility y of the mo ristics.	ınufacturei	engthened by MS or its representa evant details of th	tive to provide	and keep co	mplete record	s about individu					elevant pro	oduction	
Had the Economic Operators details of how their construction products are identified /marked and stock control procedures in accordance with the CPR.  Note  The traceability procedures have been strengthened by MSO liaising with the Economic Operator and the Notify Body as part of the Factory control process  Marking and traceability  Based on the certificate the manufacturer is authorized to mark the construction product itself, the accompanying label, the packaging or the accompanying commercial documents with the CE mark as well as with a reference to the certification provided that the Technical Specifications do not prescribe something else. (See Annex 2 Table 5.)																

## C3 - Campaign Findings (Summary of Market Surveillance Actions Taken)

The campaign findings are reported in the tabulated format below. Refer to Table							Marke	t Surve	illance	Actions	s Taken							Total
C4 & C5 Campaign Findings & Corrective								(Ar	nonymis	sed)								No.
Actions Taken						T -					1 1/	Ι.						
	Α	В	С	D	E	F	G	Н	· ·	J	K	L	M	N	0	Р	Q	
Manufacturer ID Reference	3406	8453	8877	5796	1691	2709	6037	3951	9432	4010	5899	2740	2192	5141	3854	8061	2576	
Information requested under Regulation 12	2(3) of th	ne Europ	<u>ean Un</u>	ion (Cor	<u>istructio</u>	n Produ	ıcts) Reg	gulations	<u> 2013</u> r	elating t	o the re	levant c	onstruc	tion pro	duct:			
EN 771-3 Specification for masonry units - Part 3: Aggregate concrete masonry units (Dense and lightweight aggregates) and,																		
EN 12620:2002+A1:2008 - Aggregates for concrete and the relevant national provisions S.R. 16:2016 Guidance on the use of I.S. EN 12620:2002+A1:2008 - Aggregates for Concrete	✓	✓	✓	✓	✓	✓	<b>✓</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	17
Corrective Action Notice <sup>24</sup> issued under Reg	gulation	14(1) of	the Eur	ropean l	Jnion (C	Construc	tion Pro	ducts) R	egulatio	ons 2013	related	the rel	evant co	nstructi	ion prod	luct:		
EN 771-3 Specification for masonry units - Part 3: Aggregate concrete masonry units (Dense and lightweight aggregates)						<b>✓</b>	<b>✓</b>											2
EN 12620:2002+A1:2008 - Aggregates for concrete and the relevant national provisions S.R. 16:2016 Guidance on the use of I.S. EN 12620:2002+A1:2008 - Aggregates for Concrete		<b>✓</b>																1
Corrective actions taken by NBC&MSO <sup>25</sup>	Details	s and ou	tcomes	of the c	orrectiv	e action	s taken a	are in Ta	able C4 a	& C5 Ca	mpaign	Findings	& Corre	ective A	ctions Ta	aken.		

<sup>&</sup>lt;sup>24</sup> 14(1) Corrective actions in relation to the 3 Nr. Economic operators 2 Nr have taken corrective actions and the products has been brought into compliance; and the other economic operator is working to bring their product into compliance (ref table C1 and C2 Campaign Findings below this table.

OECD policy "Challenges for Regulatory Compliance" enforcement pyramid for regulatory compliance to ensure CE Marking & DOPs are in compliance with CPR requirements as per NBC&MSO Inspection Protocol, written & verbal communications, <a href="https://www.oecd.org/gov/regulatory-policy/46466287.pdf">https://www.oecd.org/gov/regulatory-policy/46466287.pdf</a>

The campaign findings are reported in the tabulated format below. Refer to Table C4 & C5 Campaign Findings & Corrective Actions Taken							Marke		<b>illance</b> nonymis		s Taken							Total No.
	Α	В	С	D	Е	F	G	Н	ı	J	K	L	M	N	0	Р	Q	
Manufacturer ID Reference	3406	8453	8877	5796	1691	2709	6037	3951	9432	4010	5899	2740	2192	5141	3854	8061	2576	
EN 771-3 Specification for masonry units - Part 3: Aggregate concrete masonry units (Dense and lightweight aggregates)																		
EN 12620:2002+A1:2008 - Aggregates for concrete and the relevant national provisions S.R. 16:2016 Guidance on the use of I.S. EN 12620:2002+A1:2008 - Aggregates for Concrete																		
A risk assessment being carried out due	Details	of risk	assessm	ent for	a produ	ct not a	hieving	the dec	lared pe	erformai	nce are	shown i	n Table	C4 & C5	Campai	gn Findi	ngs &	
to the relevant construction not achieving	Correc	tive Act	ions.															
the declared performance and presenting																		
a risk for the fulfilment of the basic																		
requirements for construction works (art.																		
56 CPR):																		
EN 771-3 Specification for masonry units - Part 3: Aggregate concrete masonry units (Dense and lightweight aggregates)																		
EN 12620:2002+A1:2008 - Aggregates for concrete and the relevant national provisions S.R. 16:2016 Guidance on the use of I.S. EN 12620:2002+A1:2008 - Aggregates for Concrete																		
Notice in writing issued under Regulation	There	There have been no Notice in writing issued under Regulation 14(2) of the European Union (Construction Products) Regulations																
14(2) of the European Union	2013 i	2013 initiated to date.																
(Construction Products) Regulations																		
2013, related to each relevant																		
construction product:																		

The campaign findings are reported in the tabulated format below. Refer to Table C4 & C5 Campaign Findings & Corrective Actions Taken							Marke		illance		Taken							Total No.
Actions raken	Α	В	С	D	E	F	G	Н	ı	J	К	L	М	N	0	Р	Q	
Manufacturer ID Reference	3406	8453	8877	5796	1691	2709	6037	3951	9432	4010	5899	2740	2192	5141	3854	8061	2576	
Referral to the Minister under Regulation 14(3) of the European Union (Construction Products) Regulations 2013, related to each relevant construction product:	There	have be	en no re	eferrals t	to the M	linister i	nitiated	to date	•									
Prosecutions initiated relating to each relevant construction product:	There	have be	en no pi	rosecuti	ons initi	ated to	date.											

# • C4 - Campaign Findings

Des	cription	Response	Comment
a.	Number of Economic Operators (EO) inspected.	17	Additional Inspections were carried out on 4 EO.
b.	Construction products (CPR) covered by audit	EN 771-3:2011+A1:2015_Specification for masonry units - Part 3: Aggregate concrete masonry units (Dense and lightweight aggregates).  EN 12620:2002+A1:2008 - Aggregates for concrete and the relevant national provisions S.R. 16:2016 Guidance on the use of I.S. EN 12620:2002+A1:2008 - Aggregates for Concrete.	Refer to Campaign Findings - EN 771-3 Specification for masonry units - Part 3: Aggregate concrete masonry units (Dense and lightweight aggregates). and Campaign Findings- I.S. EN 12620:2002+A1:2008 - Aggregates for concrete and the relevant national provisions S.R. 16:2016 Guidance on the use of I.S. EN 12620:2002+A1:2008 - Aggregates for Concrete
C.	Sampling and testing carried out.	Samples from Economic operators/manufacturers. Testing to reference methods as prescribed in Annex D EN 771-3:2011+A1:2015_Specification for masonry units - Part 3: Aggregate concrete masonry units (Dense and lightweight aggregates). Aggregate Samples from Economic operators/manufacturers testing to reference methods in EN 12620 Annex D and the relevant national provisions S.R. 16:2016 Guidance on the use of I.S. EN 12620:2002+A1:2008 - Aggregates for Concrete	Corrective action was taken where non-compliance was identified. Refer to table C5 Corrective Actions Taken.
d.	Results.	Aggregate concrete block samples tested; all results met the requirements as set out in EN 771-3:2011+A1:2015 Specification for masonry units - Part 3: Aggregate concrete masonry units (Dense and lightweight aggregates).  1 Nr. aggregate sample test result was more than prescribed values permitted by I.S. EN 12620:2002+A1:2008 - Aggregates for concrete and the relevant national provisions S.R. 16:2016 Guidance on the use of I.S. EN 12620:2002+A1:2008 - Aggregates for Concrete	Corrective action was taken where non-compliance was identified. Refer to table C5 Corrective Actions Taken.
e.	Non-Compliances found with relevant harmonised European standards and relevant national provisions (Standard Recommendations).	1 Nr. aggregate sample test result was more than prescribed values permitted by I.S. EN 12620:2002+A1:2008 - Aggregates for concrete and the relevant national provisions S.R. 16:2016 Guidance on the use of I.S. EN 12620:2002+A1:2008 - Aggregates for Concrete	Corrective action was taken where non-compliance was identified. Refer to table C5 Corrective Actions Taken.

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De	scription	Response	Comment
f.	Documentation received and assessed.	CE Marking, DOPs & FPC	Refer to table C1 Campaign Findings - EN 771-3 Specification for masonry units - Part 3: Aggregate concrete masonry units (Dense and lightweight aggregates). and Refer to table C2 Campaign Findings- I.S. EN 12620:2002+A1:2008 - Aggregates for concrete and the relevant national provisions S.R. 16:2016 Guidance on the use of I.S. EN 12620:2002+A1:2008 - Aggregates for Concrete
g.	Level of compliance with CPR (Articles 4-9 Regulation 305/2022) found with the documentation.	<ul> <li>a. DOPs are not fully populated.</li> <li>b. In most cases, CE Marking &amp; DOPs are not provided as separate documents.</li> <li>c. Absence of instructions and safety information</li> <li>d. Poor traceability documentation/procedures.</li> <li>e. Poor traceability documentation/procedures.</li> <li>f. Issues with marking &amp; stock control of products</li> </ul>	Corrective action was taken where non-compliance was identified.  All the relevant economic operators in the state have been identified for follow-up surveillance under the 2022/23  National Market Surveillance Strategy-Ireland
i.	Risk assessment, if necessary, carried out.  Corrective action/if any.	All economic operators were inspected and sampled as part of this audit.  14(1) Corrective actions in relation to the 3 Nr. Economic operators 2 Nr have taken corrective actions and the products have been brought into compliance; and the other economic operator is working to bring their product into compliance (ref table C1 below this table.  A Guide to the marketing and use of Aggregate Concrete Blocks to EN 771-3 in Ireland Further testing also carried out.	Corrective action was taken where non-compliance was identified. Refer to table C5 Corrective Actions Taken.
j.	Enforcement, initiated and/or next steps planned?	Further testing results to be reviewed.  Next steps as per OECD policy "Challenges for Regulatory Compliance" enforcement pyramid for regulatory compliance to ensure CE Marking & DOPs are in compliance with CPR requirements as per NBC&MSO Inspection Protocol, written & verbal communications. <a href="https://www.oecd.org/gov/regulatory-policy/46466287.pdf">https://www.oecd.org/gov/regulatory-policy/46466287.pdf</a>	Corrective action was taken where non-compliance was identified. Refer to table C5 Corrective Actions Taken.
k.	Promoting a culture of compliance with CPR	Education including pilot seminar to economic operators in conjunction with ICF, NSAI, GSI & DHLGH at Keadeen Hotel, 25/05/2022.  Programme of education for all Quarry Economic Operators in the state under preparation.  Circular from DHLGH regarding marking of concrete blocks as per below:  A Guide to the marketing and use of Aggregate Concrete Blocks to EN 771-3 in Ireland	An education and training programme is under preparation to deliver 2023

## C5 - Campaign Findings: Corrective Actions Taken

Overview of Market Surveillance Activity for the two Economic Operators (EO) for which certificates of Factory Production Control (FPC) were withdrawn in 2021, and one EO where essential characteristics were found on sampling and testing to be outside the limits in the harmonised European Standard:

Corrective Actions 14(1)	Economic Operator F	Economic Operator G	Economic Operator B
Reasons for Corrective Actions 14(1)	Economic Operators (EO) for which certificat withdrawn	es of Factory Production Control (FPC) were	Economic Operators (EO) DoP Essential Characteristics outside limits.
Economic Operators (EO) Reference	F	G	В
Relevant harmonised European standards and national provisions (Standard Recommendations)	EN 771-3:2011+A1:2015 Specification for masonry units - Part 3: Aggregate concrete masonry units (Dense and lightweight aggregates).	EN 771-3:2011+A1:2015 Specification for masonry units - Part 3: Aggregate concrete masonry units (Dense and lightweight aggregates).	I.S. EN 12620:2002+A1:2008 - Aggregates for concrete and the relevant national provisions S.R. 16:2016 Guidance on the use of I.S. EN 12620:2002+A1:2008 - Aggregates for Concrete
Background  (Reasons for Issuing Corrective Actions 14(1)) Notice to the Economic Operators)	The NBCMSO was Notified by the Notifying Authority that the Notified Body NSAI had withdrawn the Factory Production Control (FPC).	The NBCMSO was Notified by the Notifying Authority that the Notified Body NSAI had withdrawn the Factory Production Control (FPC).	The NBCMSO was Notified by the GSI of Tests results on samples Taken from the EO had not achieved the declared performance as set in I.S. EN 12620:2002+A1:2008 - Aggregates for concrete and the relevant national provisions S.R. 16:2016 Guidance on the use of I.S. EN 12620:2002+A1:2008 - Aggregates for Concrete
Date of Corrective Actions 14(1)) Notice to the Economic Operators	14(1) issued 20/10/2021.	14(1) issued 17/11/2021.	14(1) issued 19/08/2022.
Inspections By MSO, GSI, Donegal County Council	Yes	Yes	Yes
Samples Testing by MSO & GSI	Yes	Yes	Yes
12(3) Requests for Information from EO.	Yes	Yes	Yes

Overview of Market Surveillance Activity for the two Economic Operators (EO) for which certificates of Factory Production Control (FPC) were withdrawn in 2021, and one EO where essential characteristics were found on sampling and testing to be outside the limits in the harmonised European Standard:

Corrective Actions 14(1)	Economic Operator F	Economic Operator G	Economic Operator B
Status/response to the 12(3) Request from each EO.	Request issued 23/11/2021.  No response received. 25/11/2021- 10/12/2021 communication follow-up. 08/12/2021& 15/03/2022 Inspection follow-up NBCO-no Activity-not placing blocks on the market.	Request issued 07/12/2021. 08/12/2021- 10/12/2021- 22/12/2021 communication follow-up. 22/03/2022- Inspection follow-up NBCO-No blocks being placed on the market	Request issued 23/11/2021. 11/03/2022 communication follow-up. Inspection follow-up by NBCO/Donegal Co. Co/GSI 02/02/2022 and samples taken.
Risk assessment carried out on constructions products were the Economic Operators certificates of Factory Production Control (FPC) was withdrawn	A number of samples of the aggregate was taken by the GSI from stockpiles and from Quarry Face of the EO to be tested, to verify compliance with EN 12620:2002+A1:2008 - Aggregates for concrete and the relevant national provisions S.R. 16:2016 Guidance on the use of I.S. EN 12620:2002+A1:2008 - Aggregates for Concrete  A Number of Samples of the aggregate concrete masonry unit was taken by the NBCMSO & Donegal Co.Co. from stock to verify compliance with EN 771- 3:2011+A1:2015 Specification for masonry units - Part 3: Aggregate concrete masonry units (Dense and lightweight aggregates).  Tests on Blocks to (Suite A report to I.S. 465:2018) to establish the correlation with Blocks and SR16	A number of samples of the aggregate was taken by the GSI from stockpiles and from Quarry Face of the EO to be tested, to verify compliance with EN 12620:2002+A1:2008 - Aggregates for concrete and the relevant national provisions S.R. 16:2016 Guidance on the use of I.S. EN 12620:2002+A1:2008 - Aggregates for Concrete  A Number of Samples of the aggregate concrete masonry unit was taken by the NBCMSO & Donegal Co.Co. from stock to verify compliance with EN 771-3:2011+A1:2015 Specification for masonry units - Part 3: Aggregate concrete masonry units (Dense and lightweight aggregates).  Tests on Blocks to (Suite A report to I.S. 465:2018) to establish the correlation with Blocks and SR16	N/a

Overview of Market Surveillance Activity for the two Economic Operators (EO) for which certificates of Factory Production Control (FPC) were withdrawn in 2021, and one EO where essential characteristics were found on sampling and testing to be outside the limits in the harmonised European Standard:

Corrective Actions 14(1)	Economic Operator F	Economic Operator G	Economic Operator B
A risk assessment being carried out due to the relevant construction not achieving the declared performance and presenting a risk for the fulfilment of the basic requirements for construction works (art. 56 CPR):	N/a	N/a	A Number of Samples of the aggregate was taken by the GSI from stockpiles and from Quarry Face of the EO to be tested, to verify compliance EN 12620:2002+A1:2008 - Aggregates for concrete and the relevant national provisions SR 16.
Corrective Action taken by <i>Economic</i> Operators to bring the construction product into compliance.	EO had to go through the process of obtaining a new certificate of Factory Production Control (FPC)	EO had to go through the process of obtaining a new certificate of Factory Production Control (FPC)	EO had to go through the process of revising their certificate of Factory Production Control (FPC) with an additional audit by their notified body.
Confirmation of compliance with CPR for each EO or otherwise?	Currently In audit Process for a Certificate of Factory Production Control (FPC)	29/04/2022 EO were issued a certificate of Factory Production Control (FPC) from Notified Body NSAI	20/10/2022 EO Adjusted their Factory Production Control (FPC) to Comply with the CPR.

#### D. Conclusions

The Construction Products Regulation/Directive have been in force in Ireland since 1992.

The request by the Minister to carry out an audit has been a worthwhile and welcome exercise for the industry, the 31 Market Surveillance Authorities, and the National Market Surveillance Office (NBCMSO which was set up in 2021).

While this report deals with the specific audit of quarries in County Donegal as requested by the Minister, following the withdrawal by NSAI of certificates of conformity of factory production control processes from two manufactures of aggregate concrete blocks in the County, it coincided with the National Market Surveillance Campaign for 2021 which was focused on construction product code Area 24, construction products generated from quarries and pits, throughout the Country.

As part of the National campaign, led by Dublin City Council - National Building Control & Market Surveillance Office, 105 quarries across 27 Local Authorities (including quarries in Donegal) were visited, inspected and checks carried out for formal and technical compliance with the Construction Product Regulations materials sampled and sent for testing where appropriate.

While the audit found that there were levels of non-compliance with the requirements of the CPR among the manufacturers/distributors in Donegal, the issues primarily related to errors in and omissions of the paperwork and generally did not reflect a concern with the tested performance of the actual product. It should be noted that these are consistent with the levels of non-compliance found nationwide.

It is apparent that further work needs to be done not just in Donegal but in the rest of the state. This audit will now form the basis of the Market Surveillance Programme 2022-2023 and a mechanism for the delivery of market surveillance of construction products in the state. Whilst the audit in Donegal was specifically aimed at products Area Code 24 of Annex 4 of the CPR, it has provided the basis of established procedures that can be used for the implementation of market surveillance on all products containing aggregates as a constituent material in the state. It has allowed the NBCMSO in conjunction with GSI, TII, MSAs to develop a database of quarries/economic operators who are placing construction products, the source of which is aggregates from quarries and pits, on the market (Area Code 24). This database will be shared with the Market Surveillance stakeholders i.e., the:

- 31 Local Market Surveillance Authorities, within their respective administration areas,
- GSI as the Competent National Authority for Aggregates (Area Code 24) who may sample and assess the quarries from a geological standpoint; and
- TII as the Competent National Authority for Aggregates (Area Code 12, 23 & 24).

There was good engagement with Market Surveillance Authorities and "economic operators". It is important that this market surveillance "Area Code 24-aggregates" programme is continued/incorporated into future National Market Surveillance programmes of planned announced/unannounced inspections.

## Conclusions and Recommendations

A programme of inspection and sampling of aggregate concrete block "economic operators" was conducted in accordance with the European Commission guidance document <u>Good practice for Market Surveillance</u><sup>26</sup>.

At least one inspection was conducted on each economic operator which included inspection and/or sampling including verbal and email requests to supply CPR required documentation CE marking, the DoP and the safety information.

Where required GSI provided technical assistance in the constituent aggregate evaluation, inspection, and sampling.

#### Formal Compliance Evaluation

Many "economic operators" DoPs and CE Markings are hybrids of the two, with some suppliers not having a DoP or CE marking in accordance with the strict requirements of CPR. It is noted that there is flexibility when drawing up a DoP, but it must be in accordance with Annex III of Regulation (EU) No. 574/2014. Most economic operators had no safety information in relation to their products. Of note is the following (also refer to Figure 2 for Prescribed Details of Contents of a Declaration of Performance):

- Absence of the "Authorised Representative" where required.
- DoP & CE marking not dated and/or signed.
- The intended use is absent from the CE marking and/or the DoP.
- Absence of reference to harmonised standard.
- Absence of full traceability documentation which must be maintained under CPR for 10 years.

There was also difficulty with documents checks as in many cases the economic operator received the Certificate of Conformity of the Factory Production Control (FPC), DoP, CE documents for a construction product in one

company name and placed these construction products on the market in another company name, using the same FPC.

It was observed that there is a lack of understanding of CPR by economic operators and end-users regarding their obligations to specify use requirements; the obligation of the economic operator to provide the CPR documentation with the construction product and end-user responsibility to check this CPR documentation and satisfy themselves that it is fit for purpose.

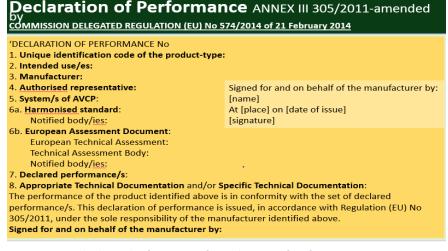


Figure 2 Prescribed Details of Contents of a Declaration of Performance

Similarly with the CE marking there was an observed a lack of conformance with prescribed requirements for CE marking, ref, <u>Articles 4-9 Construction Products Regulations 305 of 2011</u>.

Responses to information requests issued under regulation 12(3) of the European Union (Construction Products) Regulations 2013 to the economic operators were of poor quality and details.

<sup>&</sup>lt;sup>26</sup> https://ec.europa.eu/docsroom/documents/23041

#### Summary formal compliance:

As requested under S.I. 225 of 2103 and prescribed in Regulation (EU) 305 of 2011, the following formal non-compliances were observed in all cases:

CE marking has been affixed in breach of Article 8 or 9; CE marking has not been affixed, when required, in accordance with Article (2); without prejudice to Article 5, the declaration of performance has not been drawn up, when required, in accordance with Article 4; the declaration of performance has not been drawn up in accordance with Articles 4, 6 and 7; the required labelling <u>or</u> instructions for use are incomplete or missing and the technical documentation is/was either not available or not complete at the time of the evaluation, and/or inspection.

#### **Technical Compliance Evaluation**

Evaluation, inspections, physical checks & testing were carried out to determine compliance with technical requirements i.e., to establish whether the product is fulfilling the essential requirements, of the harmonised technical specifications, applicable to its intended use. For constituent aggregates used in aggregate concrete block production, the GSI completed a desk assessment of geological reports made available to it from a selection of quarries in County Donegal supplying these constituent materials to the block manufacturers. Following on from this desk assessment, a programme of site visits and a targeted sampling programme was carried out to confirm the contents of the geologists reports and to confirm the declared values for aggregates within said reports. Several samples of uncertified material were also taken, ref, "GSI, Review of Donegal Quarries 2022" Appendix 4

The compressive strength across the 56 aggregate concrete block samples, with a 10N declared compressive strength value on their Declaration of Performance (DoP) when tested, all exceeded the declared performance with the average compressive strength being 19N/mm<sup>2</sup>.

It was noted that Dimensional Tolerance, Configuration, Gross/Net Density, Compressive Strength, Water absorption, Moisture movement, Shear Bond Strength, Flatness of bed faces all met the declared performance as set out on the manufacturers DoP and were within the limits as prescribed in the harmonised Standard EN 771-3:2011+A1:2015, "Specification for masonry units - Part 3: Aggregate concrete masonry units (Dense and lightweight aggregates"). It was also noted that the "intended use" in all cases was "For use in walls, columns, and partitions" which is in accordance with the requirements of EN 771-3:2011+A1:2015.

However, regarding the essential characteristic "Durability against freeze/thaw", the declared performance was stated as "Not to be left exposed" and for "Dangerous substances" the declared performance was NPD (No Performance Declared).

#### Summary technical compliance:

EN 771-3:2011+A1:2015, the harmonised standards provide the methods and the criteria for assessing the performance of the construction products in relation to their essential characteristics. These essential characteristics as declared on the DoP on testing demonstrated compliance with CPR.

It is the responsibility of the end-user to read the DoP and satisfy themselves that the "construction product" is suitable for their end-use and be aware of the limitations of a DoP and the fact that these aggregate concrete blocks must be constructed in accordance with the requirements of S.R. 325:2013+A2:2018 "Recommendations for the design of masonry structures in Ireland to Eurocode 6" and comply with the relevant requirements of the Building Regulations. "A Guide to the Marketing and Use of Aggregate Concrete Blocks to EN 771-3 in Ireland for manufacturers, importers, distributors, specifiers, designers, builders, certifiers and end users" Version 1.0 April 2022 provides an essential guide in drawing up a DoP for the information which should be provided for a common masonry unit to EN 771-3:2011+A1:2015, taking into consideration the national provisions that exist in Ireland e.g. S.R. 325 and Technical Guidance Documents (TGDs).

#### General Overview of Audit Actions

#### Actions

- Technical Non-Compliance: the NBCMSO have implemented a programme of monitoring and follow-up
  inspections of Quarries by GSI and NBCMSO where technical non-compliances were identified and
  corrected to ensure continued compliance with the CPR. This includes Economic Operator situations
  where the Factory Production Control Certificates were withdrawn by the Notified Body, and they have
  completed the reinstatement process.
- Formal Non-Compliance: the NBCMSO have implemented a programme of sampling & inspections for corrective actions, to bring EOs documentation into compliance of the CPR in conjunctions with the Notified Bodies and the relevant MSAs.

The above actions have been included in the NBCMSO 2022 National Market Surveillance Strategy on behalf of Ireland July 2022. In 2023 and following years, it is proposed to continue with and expand on this proactive market surveillance inspection programme concentrated on construction products generated by economic operators from quarries and pits, specifically products from Area Code 24 (Aggregates) of the CPR focusing on Aggregates for:

- a. Concrete (EN 12620).
- b. Bituminous Mixtures (EN13043).
- c. Unbound and hydraulically bound materials (EN 13242)
- d. Masonry units (Dense and lightweight aggregates) (EN 771-3).

The prescribed Competent National Authorities GSI and TII specialist support will be leveraged for the programme implementation.

#### Recommendations

The following recommendations are made based on the audit findings and observations.

<u>Recommendation 1</u>-Incorporate "Area Code 24 Aggregates" Market Surveillance Planned Market Surveillance Campaign into 2022 National CPR Market Surveillance Strategy.

It is important to build on and strengthen the market surveillance activity in relation to "economic operators" placing "aggregate construction products" on the market, noting that not every product containing aggregate is a "construction product" for the purpose of the construction products regulation; the end use being the determining factor.

It is proposed to continue with and expand on the 2021 **proactive market surveillance** inspection programme concentrated specifically on products from Area Code 24 (Aggregates) of the CPR focusing on Aggregates for:

- a. Concrete (EN 12620)
- b. Bituminous Mixtures (EN13043)
- c. Unbound and hydraulically bound materials (EN 13242)
- d. Masonry units (Dense and lightweight aggregates) (EN 771-3)

The prescribed Competent National Authorities (GSI and TII) specialist support will be leveraged for the programme implementation.

The learning from this audit will enable and enhance the secure and sustainable supply of compliant construction products to the market.

The focus of this campaign will be to enforce the "Formal Compliance" requirements of CPR. An increased level of engagement with the Notified Bodies has been implanted and is ongoing to ensure corrective action is taken.

<u>Recommendation 2</u>- Requirement for Training and upskilling of Market Surveillance Authorised Officers under Construction Production Regulations.

The Construction Products Regulation place a requirement on Member States to have "Competent" Market Surveillance Authorities. To achieve this the State needs competent authorised officers to carry out this work. This is a specialist technical area of competence covering product Area Codes 1-35<sup>27</sup>...

#### Recommendation 3-Requirement for Training for Economic Operators

We have observed from this audit that some quarry economic operators, owners and employees have only a basic understanding of their roles and responsibilities under CPR.

# <u>Recommendation 4</u>-Properly Funded & Resourced Market Surveillance Authorities, with agreed NOAC Service Indicators

An EU wide framework for market surveillance requires Member States to have adequate financial resources available for the appropriate staffing and equipping of the market surveillance authorities. Building Control Authorities are designated Market Surveillance Authorities (the 31 Local Authorities have appointed approximately 70 authorised officers) for Construction Products Regulation.

To manage and measure the effectiveness Market Surveillance in Ireland requires dedicated government funding to appoint competent Market Surveillance Officers for the CPR's 35 Product Areas.

It is necessary to establish a Market Surveillance Structure in this State which is fit for purpose and properly resourced. This must include agreed and adopted market surveillance methodology, guidelines, risk assessment and service indicators for the market surveillance of construction products.

Therefore, we must identify the most appropriate mechanism which will deliver a quality service perhaps taking a regional approach for oversight. This mechanism must also be accompanied by agreed NOAC<sup>28</sup> Service Indicators. Service indicators have been set out in Irelands National Market Surveillance Strategy (ref, Table 1 below) and it is recommended that these be adopted by NOAC. This will require discussion with the CCMA/DHPLG/NOAC.

Table 1	Market Surveillance of Construction Products under S.I. 225 of 2013 Indicators	2021	2022
1.	Total No. of construction product related complaints	10	4
2.	No. of formal complaints by industry concerning unfair competition	0	1
3.	Total No. of inspections and broken down by:		
	i. No. of reactive inspections undertaken on foot of complaint,	10	2
	ii. No. of self-initiated inspections, and	109	56
	iii. No. of inspections prompted by the Revenue Commissioners (i.e., Customs)	0	0
4.	Assessment of product compliance based on:		
	i. Tests performed in laboratories	148	2
	ii. Checks of products and/or documentation e.g., CE Mark, DoP, Safety Information in Use	109	54
5.	No. of inspections/ assessments resulting in:		
	i. A finding of non-compliance	2	1
	ii. Corrective actions being taken by relevant economic operator (i.e., voluntary measures)	2	0
	iii. Restrictive measures being taken by the market surveillance authority	2	1
	iv. No of ICSMS Inspections logged	45	26
	v. No of Article 12(3) of the EU(CPR) 2013 Requests for Information	32	54
	vi. No of Article 14(1) of the EU (CPR) 2013 Notices Issued/Served	6	3
6.	No. of successful prosecutions i.e., where sanctions/penalties were applied	0	0
7.	No. of inspections involving other Member State Market Surveillance Authorities	0	0
8.	Additional Comments/Other	N/A	N/A

<u>Recommendation 5</u> -Mandatory Building Regulatory Compliance Requests for Main Structural Elements (CPR Product Area 24)

It critical that Building Control Authorities in high exposure areas (ref, Figure 3 for counties) are properly resourced to ensure that Blocks used in construction are in compliance with the National Provisions (TGD A,

<sup>&</sup>lt;sup>27</sup> https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32011R0305

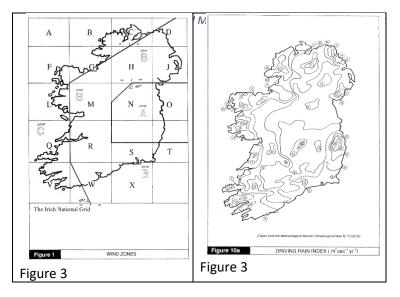
<sup>&</sup>lt;sup>28</sup> National Oversight and Audit Committee

Eurocodes and S.R. 325) and to ensure that buildings are designed and constructed in accordance with Irish Building Standards and Provisions,

The National Market Surveillance Strategy 2021 and 2022, Ireland' concentrated on construction products generated from quarries and pits, specifically products from Area Code 24 (Aggregates which form the main building structural elements i.e., foundations, floors, walls, roofs roads and pavements) to ensure compliance CPR. The NBCMSO provides support in conjunction with the Competent National Authorities (GSI and TII) to Building Control Authorities, Housing and Road Authorities.

For counties in high exposure areas ref, Figure 3, it is recommended that mandatory compliance documentation be submitted to demonstrate compliance with the requirements of the Building Regulations for the main structural elements of every building.

General Rain penetration is one of the commonest building defects, and it is essential to carefully consider design, detailing, workmanship, and materials in relation to local exposure conditions. An assessment of the local wind-driven rain index should be made. The appropriate external render can substantially enhance the rain resistance of external walls. It is essential, however, to select the right type of



mix, thickness, and number of coats and to detail the wall properly to minimize cracking, which may reduce the effectiveness of the rendering against rain penetration. The quality of workmanship achieved on site is an important factor affecting rain penetration. Table 2 below outlines location of Commencement Notices (Opt Out of Statutory Certification, and no mandatory design or construction professionals.).

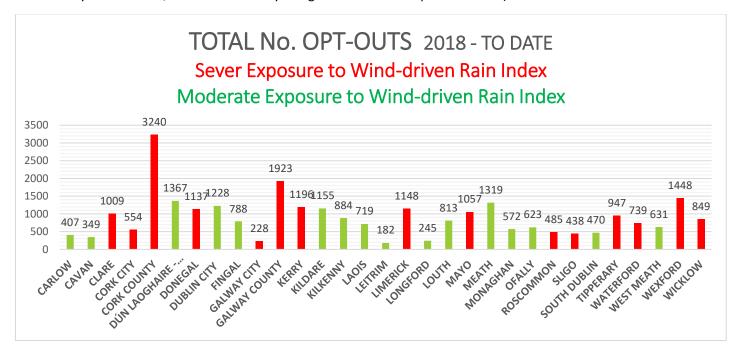


Table 3 Total number of Opt-Out Commencement Notices 2018 to date, no mandatory certification or professional required.

Recommendation 6- Promotion of the Adoption of S.R. 325:2013+A2:2018/AC:2019, RECOMMENDATIONS FOR THE DESIGN OF MASONRY STRUCTURES IN IRELAND TO EUROCODE 6 & A Guide to the marketing and use of Aggregate Concrete Blocks to EN 771-3 in Ireland

This office has observed that many consumers may not be aware of the requirements of CPR when purchasing construction products, and the design requirement for use of aggregate concrete blocks in Ireland in works or a building, i.e., S.R.325 'Recommendations for the design of masonry structures in Ireland to Eurocode 6'; which among other things, outlines the use of blocks and Bricks manufactured to I.S. EN 771-3 and S.R. 16:2016 which gives "guidance on the use of I.S. EN 12620:2002+A1:2008 - Aggregates for concrete" including blocks.

A campaign to promote compliance by economic operators with the requirements of the CPR and promote awareness among, consumers i.e., end-users, i.e., owners, designers and builders needs to be considered.

Part C of the Building Regulations "Site Preparation and Resistance to Moisture" is currently under review and the review committee should consider including suggested wall types for exposed locations.

<u>Recommendation 7</u>- National Quarry Register-Coordinated and Integrated Approach to Regulation of quarries in Ireland

It is very important that a coordinated and integrated approach to regulation of quarries in Ireland be put in place (Planning, Environment, Public Procurement and Construction Products Regulation), in order that a long-term viable solution is in place to assist in all regulatory compliances. A national quarry register which is maintained and properly resourced is key. This audit and the 2021 National Market Surveillance campaign has provided the most up to date database which will form the basis of this.

#### Summary of the Recommendations

The aim of this joint activity was:

- Promoting compliance
- Identifying non-compliances
- Raising awareness
- Providing guidance in relation to the Union harmonisation legislation

Programme Category	Description- Recommendation Item	Action by				
PROMOTING COMPLI	PROMOTING COMPLIANCE.					
Recommendation 1	Recommendation 1-Incorporate "Area Code 24 Aggregates" Market Surveillance Planned Market Surveillance Campaign into 2022 National CPR Market Surveillance Strategy.	31 MSAs NBCMSO				
Recommendation 7	Recommendation 7 Recommendation 7- National Quarry Register-Coordinated and Integrated Approach to Regulation of quarries in Ireland.					
IDENTIFYING NON-CO	DMPLIANCES.					
Recommendation 4	Recommendation 4-ProperlyResourced Market Surveillance Authorities, with agreed NOAC Service Indicators.	DHLGH/CCMANOAC				
Recommendation 3 Recommendation 3-Requirement for Training for Economic Operators		Industry, Notified Bodies , MSAs,				
RAISING AWARENESS						
Recommendation 6	Recommendation 6- Promotion of the Adoption of S.R. 325:2013+A2:2018/AC:2019, RECOMMENDATIONS FOR THE DESIGN OF MASONRY STRUCTURES IN IRELAND TO EUROCODE 6 & A Guide to the marketing and use of Aggregate Concrete Blocks to EN 771-3 in Ireland	NBCMSO DHLGH, Notified Bodies, Industry, Professions,				
Recommendation 5	Recommendation 5 -Mandatory Building Regulatory Compliance Requests for Main Structural Elements (CPR Product Area 24)	31 BCAs NBCMSO				
PROVIDING GUIDANCE IN RELATION TO THE UNION HARMONISATION LEGISLATION.						
Recommendation 2	Recommendation 2- Requirement for Training and upskilling of Market Surveillance Authorised Officers under Construction Production Regulations	NBCMSA, DHPLG, 3 <sup>rd</sup> Level Institutions				

Table 4 Summary Implementation Programme of Recommendations

# Appendix A: Requirements for CE Marking

Below as summarised from:

 $\frac{https://ec.europa.eu/docsroom/documents/12308/attachments/1/translations/en/renditions/native}{native}$ 

**Delegated Regulation Annex III of the CPR** 

	Description DECLARATION OF PERFORMANCE AND CE MARKING Articles 4-9 Regulation 305 of 2011 laying down harmonised conditions for the marketing of construction products and repealing Council Directive 89/106/EEC	EN 771- 3:2011+A1:2015 - Specification for masonry units	EN 12620:2002+A1:2008 - Aggregates for concrete	EN 13139:2002 + NA 2010 - Aggregates for mortar	EN 13242:2002 +A1:2007 - Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction	EN 13043:2002/AC:2004 - Aggregates for bituminous mixtures and surface treatments for roads, airfields, and other trafficked areas
	Declaration of Performance					
1.0	Unique identification code of the product-type					
2.0	Date of the declaration of performance					
3.0	Name and address of the manufacturer details					
4.0	Is there a reference number of the declaration of performance (DoP)?					
5.0	Is the declared performance in accordance with Annex ZA of the harmonised standard)					
6.0	Is there a reference to the harmonised specification					
8.0	Identification number of the notified body					
9.0	System of AVCP					
10.0	Which AVCP system is applied					
11.0	Is the intended use available					
	CE Marking					
12.0	Is the CE marking followed by the two last digits of the year in which it was first affixed					
13.0	Name and address of the manufacturer details					
14.0	Unique identification code of the product-type					
15.0	Is there a reference number of the declaration of performance (DoP)					
16.0	Is there a reference to the harmonised specification					
17.0	Is there an identification number of the notified body					
18.0	Is the intended use available					

## Appendix B Information Note on Market Surveillance

Circulated to Each Economic Operator

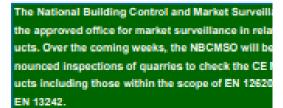
## Market Surveillance Car

### Aggregate Products within the sco of EN 12620, EN 13043, EN13139 a EN 13242 series must be CE Mark

## If you are an Economic Operator:

- Manufacturer;
- Importer; or
- Retailer / Distributor

of aggregates products you should be 🎎 aware of your obligations under the rules for CE Marking.



The objective of the Market Surveillance Office is ucts compliant with the Construction Products Re are placed on the market.

If you receive a visit, the Market Surveillance Offic applied the CE Marking correctly, that you have all tion in place (see overleaf) and may take a sample obstructing, impeding or providing false informati ficer may be committing an offense under the EU

The Market Surveillance Campaign 2021 is co-ord Dublin City Council - National Building Control Of

### What happens if I receive a visit from the Market Surveillance Authority?

In conservat.
If you receive a visit, from an Authorised Officer, in exercise of the powers conferred on the Authorised Officer by Regulation 10(x) of the European Union (Construction Products) Regulations 20(x), the information outlined in Table 1 below can be requested for inspection, having regard to the responsibility you have under the Construction Products Regulation No. (EU) 3050011.

Table 1: Information sought (but not limited to) relevant to the responsibility of each

No.	Description	Manufacturer	Importer	Distributori Retailer
1.	A copy / photograph of the CS mark	Y	Y	Y
2.	A Valid Declaration of Performance (DuP)	Y	Y	Y
1	The technical documentation to support that the product complies with the requirements of EN 12620, EN 13043, EN 13042 and EN 12139.	¥	¥	¥
44.	The test reports and details in respect of type testing of the product.	¥	-	-
11.	Details of the notified factory production control certification body (AVCP System 2+).	¥	-	-
	The instructions and safety information	Y	Y	Y
<b>2</b> .	The means by which products within the scope of EN 1989b, EN 13943, EN1319 and EN 13942 are placed, or made available, on the market can be identified and traced through- out the supply chain.	¥	¥	¥

2. TIME FOR COMPLIANCE
The information stought should be readily available onsite. CE Marking of construction products is mandatory across the EU singe 1 July 2013.

Innex sturmable
in the event that the required documentation is not available at time of inspection or on request for information, you may
make representations if writing to the Market Surveillance Authority within 14 days. The Market Surveillance Authority
may, having considered any such representations, amend the terms of this request for information or confirm or revoke t request for information.

#### 4. TAKE FURTHER NOTICE.

- the Economic Operator:

  a) do not comply with the terms of a request for information within the abovementioned period or by the documentation submitted made available on the date of visit, is not in compliance with the Construction

Products Regulation recommend made available on the date of visit, is not in compliance with the Construction the Market Surveillance Artificially may take such steps as it considers reasonable and necessary to secure compliance with the request for information under the Construction Products Regulation, up to and including prosecution through the Courts.

WARNING
 A person guilty of an offence-under the European Union (Construction Products) Regulations 3013 is liable:
 — a. A. Ann. or N. a. Neve. of incolsometric to 10.3 months or

- a) on summary conviction to a fine up to 45,000 or to a series of imprisonment up to 3 months or to both; or
   on conviction on indictment to a line up to 4500,000 or to a term of imprisonment up to 12 months or both.

#### 6. ADDITIONAL INFORMATION

- Regulation No. (EU.) 305/2011 http://exceuroca.eu/Lact/filerofLact/filerofLact/filerof.co/ uniOUL\_2011 586 0005 00055M PDF European Union (Construction Products) Regulations 3013 http://www.inintent.netook.ie/2013/en/e/0255.toxx
- Cli Making of Construction Products—little by Stee.

  EN 13603303-4-13008 Aggregates for concerns, EN 1364330039AC-2004 Aggregates for bituminous mintures surface treatment for roads, artisels and other trafficked areas or EN 133433003-A1 3007 Aggregates for unto and hydraulically bound materials for use in civil engineering work and road construction.

## Appendix B1 "Article 12(3) of the European Union (Construction Products) Regulations 2013 Request for Information"



National Building Control and Market Surveillance Office

DD/MM/2022

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#### REQUEST UNDER REGULATION 12(3) OF THE EUROPEAN UNION (CONSTRUCTION PRODUCTS) REGULATIONS 2013

TO: Company Secretary and Each Company Director,

Name of Quarry, Address 1.

Address 2.

County.

Be: Request for documentation to ensure products placed on the market are complaint with Construction Products Regulation (EU) No 305/2011

Dear Sir or Madam.

- I Richard Butler, as an authorised officer of the National Building Control and Market Surveillance office, in exercise of the powers conferred on me by Regulation 12(3) of the European Union (Construction Products) Regulations 2013 hereby request the information set out below from Name of Quarry:
- a list of all construction products you are placing on the market
- a list of all construction products you are importing (for use in manufacturing or sale) a copy of the CE mark for all construction products you are placing on the market
- the declarations of performance in respect of all construction products you are placing on the market
- Completion of the accompanying spreadsheet, (see Appendix 1)
- the technical documentations to support all construction product you are placing on the market complies with the requirements of:
  - EN 771-3:2011=A1:2015 Specification for masonry units Part 3: Aggregate concrete masonry units (Dense and lightweight aggregates)
  - EN 12620:2002=A1:2008 Aggregates for concrete
  - EN 13139:2002 + NA 2010 Aggregates for mortar
  - EN 13242:2002 +A1:2007 Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction
  - EN 13043:2002/AC:2004 Aggregates for bituminous mixtures and surface treatments for roads, airfields, and other trafficked areas



NBC&MSO

- the certificate of conformity of the factory production control and details of the factory production control certification body in respect of the factory production control process (System 2+)
- the means by which all construction products placed, or made available, on the market can be identified and traced throughout the supply chain
- all test reports to support the declared performance of essential characteristics included on the Declaration of Performance, including any petrographic testing and geological reports for aggregates produced on site and/or imported

#### TIME FOR COMPLIANCE

The terms of this request for information must be complied with no later than 14 days after initial letter issued.

You may make representations in writing to National Building Control & Market Surveillance office within 5 days of this request for information regarding the terms of this request for information. The National Building Control & Market Surveillance Office may, having considered any such regresentations, amend the terms of this request for information or confirm or revoke the request for information.

The address for service of regresentations is: -

National Building Control & Market Surveillance office 3 Palace Street, Dublin.

The email address for service of representation is: -

support@nbco.gov.ie

D02 T277

#### TAKE FURTHER NOTICE

If you do not comply with the terms of this request for information within the period aforesaid, the National Building Control & Market Surveillance office may take such steps as it considers reasonable and necessary to secure compliance with this request for information. up to and including prosecution through the Courts.



NBC&MSO

National Building Control and Market Surveillance Office

Date 19/11/2021

A person guilty of an offence under the European Union (Construction Products) Regulations

- (a) on summary conviction to a fine up to €5,000 or to a term of imprisonment up to 3 months or to both; er
- (b) on conviction on indictment to a fine up to 6500,000 or to a term of imprisonment up

Red State

Authorised Officer

National Building Control and Market Surveillance Office

Yours Sincerely, Majréad Phelan,

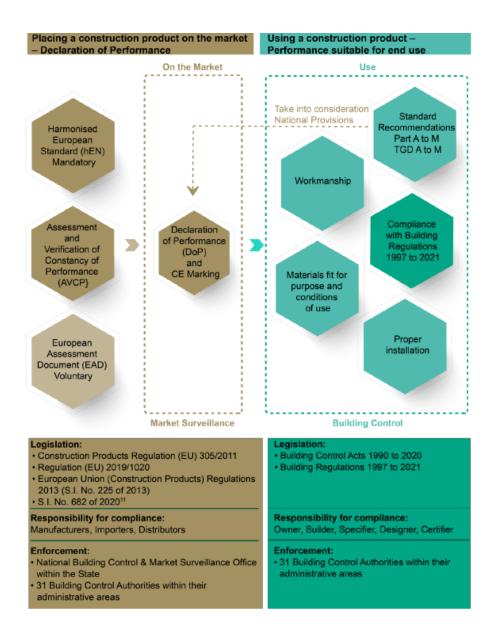
Head of the National Building Control & Market Surveillance Office

To: Name of Quarry C.c. XXXX County Council

Appendix 1 - Please refer to the accompanying spreadsheet, and the completed example of the spreadsheet (2 separate documents)

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#### 8. Appendix 3 Building Control & Market Surveillance responsibilities



### 9. Appendix 4 GSI Report





# **Review of Donegal Quarries 2022**

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# **Executive summary**

In support of a Donegal audit conducted by NBCO and Donegal County Council, Geological Survey Ireland has completed a desk assessment of geological reports made available to it from a selection of quarries in County Donegal. These reports cover one or both standards referenced by:

- S.R 21:2014 & A1:2016
- S.R.16:2016

The geologists' reports seen by Geological Survey Ireland indicate that all materials referenced within these reports meet the criteria for compliance with the relevant standards. Reports were initially provided for 5 producers within the county with an accompanying list of 15 quarries and block manufacturers. Further reports were received over the course of the study

Following on from the desk assessment, a programme of site visits and a targeted sampling programme was carried out to confirm the contents of the geologists reports and to confirm the declared values for aggregates within said reports. Several samples of uncertified material were also taken. Site visits to block manufacturers with no accompanying quarry operations were not undertaken by GSI.

One sample of SR 16 material was identified as exceeding the limits as set out in the standard. These findings have been communicated to the relevant market surveillance authorities.

Where Geological Survey Ireland has had access to geologists' reports, the relevant documents have not identified excessive mica within each quarry as present in potentially deleterious quantities. It should be borne in mind that the standard in question (S.R.16:2016) does not give any explicit permissible quantities of mica or guidance on potentially deleterious morphologies and petrological settings (e.g. free & available mica, mica in fines etc..). It may be appropriate to revise the guidance around mica as a deleterious material, in the recognition that this may also require further research into the topic.

Geological Survey Ireland also notes that the identification of pyrrhotite as a deleterious material is may require further guidance. Pyrrhotite and pyrite can be challenging to discriminate within hand specimen and both minerals are opaque within standard transmitted light microscopy. Reflected light microscopy may be used to identify pyrrhotite and consideration should be given to circumstances in which this technique may be recommended.

## 1. Introduction

#### 1.1. Outline

In October 2021, Geological Survey Ireland was requested to provide technical assistance to the Dept. of Housing, Local Government and Heritage, the National Building Control & Market Surveillance Office and Donegal County Council. The assistance was requested on foot of irregularities identified by the market surveillance authorities involving the sourcing of aggregates for construction products. GSI provided technical reviews of available geologists' reports along with targeted site visits and sampling to monitor aggregate products on the current market.

#### 1.2. Process to date

Geological Survey Ireland visited an initial site (Quarry F) in Donegal on October 18<sup>th</sup> 2021 to obtain samples of an unspecified aggregate for testing which had been used in the manufacture of concrete products. GSI was informed on site that the material in question was a quartzite. A visual and preliminary inspection on October 19<sup>th</sup> confirmed the primary lithology as quartzite and the samples were sent to IGSL laboratories on October 20<sup>th</sup>. Initial results from the testing laboratory confirmed GSI's evaluation and a Professional Geologist's Report received from the quarry in question on October 22<sup>nd</sup> was also in agreement. As such it is considered that there is a negligible risk of this specific material containing any significant quantity of deleterious materials.

Following on from the initial investigation, a request was made to NSAI to share any geologists' reports that were available from quarries which may have been supplying material for the manufacture of the construction product in question. 16 quarries/block manufacturers were identified by NBCO and 9 geologists' reports were obtained.

A programme of quarry visits and sampling was also conducted to confirm the accuracy of relevant geologists' reports and to take samples where non-compliance was suspected. Material was laboratory tested from several facilities with results outlined below.

# 2. Quarry Reports & Visits

Data and reports on nine (9) extractive locations were presented to GSI for review. These included facilities in the vicinity of Muckish in north west Donegal, Letterkenny, Gweedore, Lifford and Ballintra in the south of the county (Figure 3). The geologists' reports were reviewed to ascertain if there were any clear and obvious technical non-compliance issues. Additional site visits to these and other quarries were carried out to obtain further geologists' reports if available and to assess the accuracy of these reports on the ground.

In general the geologists' reports provided accurate summations of the raw material deposits and included all relevant data required by the standards. Site visits by GSI geologists confirmed the accuracy of the geological information included in each report.

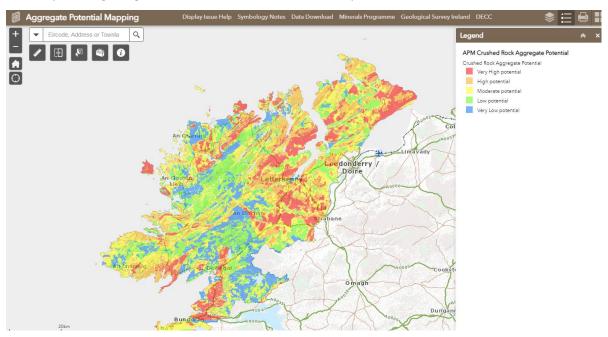


Figure 3 Sketch Map of Donegal Crushed Rock Aggregate Potential. This figure shows modelled potential for economic deposits of aggregate to exist and is not indicative of the quality or suitability of any individual quarry. This product is available via Geological Survey Ireland's online map viewer.

NBCO ID	SR 16	SR 21
F	Yes	No
В	Yes	Yes
N	Yes	Yes
X (GSI ID)	No	No
Н	Yes	No
А	Yes	Yes
0	Yes	Yes
М	Yes	Yes
1	Yes	Yes
С	Yes	Yes
D	Yes	Yes
E	No	No
G	No	No
J		
К		
L		
Р	No	No

Table 5 Geologists' Reports Available to GSI

### 2.1. Quarry F

Quarry F provided a Professional Geologist's report in October 2021 for their quarry. There is a limited geological description of the quarry, largely derived from the GSI 1:100K mapping. It is stated that "Examination of quarry faces confirms that the extracted rock at the quarry is entirely derived from quartzites."

#### 2.1.1 S.R.16:2016

The Professional Geologist's Report states: The samples are compliant with all standardised tests. Petrographic assessment confirms a low probability of deleterious material present. A geologist's statement is provided:

Aggregates produced at Quarry F are compliant with the relevant standards for the following aggregate end-uses;

• S.R.16:2016 Guidance on the use of I.S. EN12620:2004. Aggregates for Concrete Products.

#### 2.1.2 Site Visit

During a site visit to the concrete block production facility in October 2021 GSI were shown two distinct stockpiles which were in use for concrete production. One stockpile did not have an accompanying geologist's report on the date of sampling but the report referenced in Section Error! R eference source not found. was later provided. A sample taken from this stockpile was found to be in compliance with all SR16 requirements. A subsequent site visit to Quarry F confirmed the accuracy of the geologist's report provided.

The second stockpile was declared to be purchased SR 16 material from Quarry B and the relevant geological reports were available. Both stockpiles were sampled for analysis. The sample which was declared as being sourced from Quarry B was deemed to be non-compliant with the SR 16 standard due to the previously unrecognised presence of pyrrhotite.

#### 2.2. Quarry B

Quarry B provided a professional Geologists report compiled dated November 2019. The report has a comprehensive description of the quarry geology. There are two main lithologies, a lower metasediment with a dolerite dyke towards the top of the quarry. There is an absence of visible pyrite noted in the meta dolerite however there are occurrences of cubic pyrite within the metasediments, primarily the muddier horizons. A thin film of pyrite is present on occasional hornfelsed joint surfaces.

#### 2.2.1 S.R.21:2014 & A1:2016



The Professional Geologist's Report states: The material satisfies all tests with an accompanying statement from the professional geologist. Sedimentary mudrock is <10% although this does not include potentially metamorphosed sedimentary mudrock.

"The Professional Geologist is satisfied that, subject to Certification by NSAI or another suitable body, providing grading specifications continue to be met, based on his examination of the quarry, together with the chemical and physical test results supplied by the operator, material from Quarry B is suitable for use as unbound granular fill (hardcore) for use under concrete floors and footpaths and that it meets with S.R.21: 2014 & A1:2016 guidelines."

#### 2.2.2 S.R.16:2016

The Professional Geologist's Report states: The material satisfies all tests with an accompanying statement from the professional geologist.

The Professional Geologist is satisfied that, subject to Certification by NSAI or another suitable body, providing grading specifications continue to be met, based on his examination of the quarry, together with the chemical and physical test results supplied by the operator material from Quarry B is suitable for use in Concrete and it meets with S.R.16:2016 guidelines.

#### 2.2.3 Site visit

Following the assessment of material in Quarry F (Section 2.1.2) a site visit to Quarry B was organised for February 2<sup>nd</sup> 2022. A sample of SR16 stockpiled material was taken in Quarry B by Geological Survey Ireland in the presence of a representative of NBC&MSO and the quarry operator. This sample was sent to an accredited laboratory for analysis and petrographic examination to confirm the results provided by the operator. The lab analysis returned values which exceeded the limits as set out in the standard. The findings were communicated to the relevant market surveillance authorities. On foot of the adverse analytical finding, GSI, NBCMSO and Donegal County Council visited Quarry B and agreed a methodology to ensure compliance going forward. This involves a minor change to the manufacturing process for SR16 material and a programme of ongoing monitoring and further analyses to confirm compliance.

#### 2.3. Quarry N

Quarry N provided a professional Geologists report dated February 2021. A good geological description is provided and it is noted that no pyrite was seen and there is no iron oxide staining visible in the quarry.

Two basalt dykes run sub-parallel to the bedding for the length of the quarry. The basalt is soft and weathers rapidly to a grey green dust. It is stated that this material is of no use and is dug out separately from the quartzites.

#### 2.3.1. S.R.21:2014 & A1:2016

The Professional Geologist's Report states: The material satisfies all tests – although it is close to the limit for LA test. A statement is provided:

"The Professional Geologist is satisfied that, subject to Certification by NSAI or another suitable body, providing grading specifications continue to be met, based on his examination of the quarry, together with the chemical and physical test results supplied by Quarry N material from Quarry N is suitable for use as unbound granular fill (hardcore) for use under concrete floors and footpaths and that it meets with S.R.21: 2014 & A1:2016 guidelines."

#### 2.3.2 S.R.16:2016

The Professional Geologist's Report states: The material satisfies all tests – it is not suitable for high strength concrete due to its LA value. Additionally its fines content is 3% - any higher than 3% would trigger mandatory suitability assessment. A statement is provided:

"The Professional Geologist is satisfied that, subject to Certification by NSAI or another suitable body, providing grading specifications continue to be met, based on his examination of the quarry, together with the chemical and physical test results supplied by Quarry N material from Quarry N is suitable for use in Concrete and it meets with S.R.16:2016 guidelines."

#### 2.3.3. Site Visit

Geological Survey Ireland visited this quarry and inspected the quarry faces and stockpiles present. In the professional opinion of the geologists, the report provided is accurate and the material is of high quality with a low probability of containing deleterious materials.



### 2.4. Quarry X

#### 2.4.1. S.R.21:2014 & A1:2016

No geologist's report is available for Quarry X although the data provided indicates that a geologist's report was commissioned in March 2018 with a subsequent petrographic study in February 2019.

#### 2.4.2. S.R.16:2016

No geologist's report is available for Quarry X although the data provided indicates that a geologist's report was commissioned in March 2018 with a subsequent petrographic study in February 2019.

#### 2.4.3. Site Visit

A site visit from Geological Survey Ireland indicated that this facility is currently not open or producing material.

#### 2.5. Quarry H

Appendix 2 to the report supplied by Quarry F includes a geologist's report compiled in July 2021 for Quarry H. Frequency of visits is set at 3 years with the most recent site visit in June 2020.

#### 2.5.1. S.R.16:2016

The Professional Geologist's Report states: The samples are compliant with all standardised tests. The referenced petrographic reports and geological classification reports (Oct 2017 & July 2020) have not been made available. The fines content is recorded as 3% - beyond which limit further investigation would be mandated.

A statement is included:

"Based on the review of test results, the site visit and subsequent petrographic examination of the material, I am satisfied that the requirements of I.S.EN12620:2002+A1:2008 and the relevant categories in Annex A of S.R. 16:2016 are met and conclude that the aggregate is suitable for use in concrete."

#### 2.5.2. Site Visit

Geological Survey Ireland visited the site and took samples for simplified petrological analysis (i.e. evaluation of hand specimen by GSI geologists). GSI's professional opinion is that the report provided is accurate and the material is of high quality with a low probability of containing deleterious materials.

### 2.6. Quarry A



A geologist's report for Quarry A was provided dated May 2020. This identifies the production material as grits and psammites (metamorphosed sandstone) with quartzite lithologies included.

#### 2.6.1. S.R.21:2014 & A1:2016

The Professional Geologist's Report states: The material satisfies all tests. A statement is provided: The aggregates have been determined to be in compliance with the test requirements of the following relevant standards and are suitable for use in the following aggregate products which are produced from aggregates produced at Quarry A.

 S.R.21:2014+A1:2016 Guidance on the use of IS EN 13242:2002 + A1:2007 Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction.

#### 2.6.2. S.R.16:2016

The Professional Geologist's Report states: The material satisfies all tests. A statement is provided: The aggregates have been determined to be in compliance with the test requirements of the following relevant standards and are suitable for use in the following aggregate products which are produced from aggregates produced at Quarry A.

• S.R.16:2016 Guidance on the use of I.S. EN12620:2004. Aggregates for Concrete Products.

#### 2.6.3. Site Visit

Geological Survey Ireland visited Quarry A however did not gain access to the quarry. The facility was not seen to be operational and did not appear to be producing material for sale.

### 2.7. Quarry G

No geologist's report was available for material sourced from this location.

#### 2.7.1. Site Visit

Geological Survey Ireland visited this site and selected several stockpiles for sampling. Anecdotal evidence suggests that a portion of material on site was sourced from outside the State. Evaluation of the crushed aggregate material available indicated the presence of pyrrhotite and sulphur levels in excess of 0.1%, thus rendering it unsuitable for use in accordance with EN12620. These findings have been communicated to the market surveillance authorities however it should be noted that GSI was not provided with any indication that the material in question is being placed on the market or is in use in concrete products.

The petrographic report on sand sampled from this location indicated a clustering of muscovite in the fine fractions which was identified as a cause for concern.



#### 2.8. Quarry O

Quarry O provided a professional Geologists report dated February 2021. A good geological description is provided of the quartzite units currently quarried. These are generally of high quality and suitable for multiple aggregate end uses.

#### 2.8.1. S.R.21:2014 & A1:2016

The Professional Geologist's Report states: The material satisfies all tests. A statement is provided:

"The Professional Geologist is satisfied that, subject to Certification by NSAI or another suitable body, providing grading specifications continue to be met, based on his examination of the quarry, together with the chemical and physical test results supplied by Quarry O material from Quarry O is suitable for use as unbound granular fill (hardcore) for use under concrete floors and footpaths and that it meets with S.R.21: 2014 & A1:2016 guidelines."

#### 2.8.2. S.R.16:2016

The Professional Geologist's Report states: The material satisfies all tests:

"The Professional Geologist is satisfied that all geological properties of the aggregate are S.R.16 compliant and subject to obtaining a satisfactory Drying Shrinkage and Certification by NSAI or another suitable body, providing grading specifications continue to be met, based on his examination of the pit, together with the chemical and physical test results supplied by Quarry O, materials from Quarry O are suitable for use in Concrete and they meet with S.R.16:2016 guidelines."

#### 2.8.3. Site Visit

Geological Survey Ireland is of the professional opinion that the report provided is accurate and the material is of high quality with a low probability of containing deleterious materials. The total sulphur values are consistently <0.1% indicating a negligible risk of sulphide minerals.

#### 2.9. Quarry I

Geological Survey Ireland have examined a geologists report for Quarry I dated October 2021. Bedrock mapping indicates that the quarry is situated in a limestone formation suggesting a low risk of any deleterious materials present within the context of Donegal.

#### 2.9.1. S.R.21:2014 & A1:2016

The Professional Geologist's Report states: The material tested satisfies all testing requirements and has been declared suitable for SR21 end use. A geologist's statement is provided:

The aggregates have been determined to be in compliance with the test requirements of the following relevant standards and are suitable for use in the following aggregate products.

SR21: 2014 + A1: 2016 Annex E Guidance on the use of I.S.EN 13242 unbound fill materials,

#### 2.9.2. S.R.16:2016

The Professional Geologist's Report states: The material tested satisfies all testing requirements and has been declared suitable for SR21 end use. A geologist's statement is provided:

The aggregates have been determined to be in compliance with the test requirements of the following relevant standards and are suitable for use in the following aggregate products.

• S.R. 16 Guidance on the use of I.S. EN 12620:2002 Aggregates for concrete products,

#### 2.9.3. Site Visit

Geological Survey Ireland representatives visited Quarry O and are satisfied that the report provided is accurate. Samples were taken for simplified petrology which concurs with the geologist's report. GSI's professional opinion is that the material is of high quality with a low probability of containing deleterious materials.



#### **2.10.** Quarry M

A geologist's report for Quarry M was provided dated March 2020. The lithologies are described as specific quartzite unit, suggesting a low probability of deleterious materials.

#### 2.10.1. S.R.21:2014 & A1:2016

The Professional Geologist's Report states: The material tested satisfies all testing requirements and has been declared suitable for SR21 end use. A geologist's statement is provided:

The Professional Geologist is satisfied that, subject to Certification by NSAI or another suitable body, providing grading specifications continue to be met, based on his examination of the quarry, together with the chemical and physical test results supplied by the operator, material from Quarry M is suitable for use as unbound granular fill (hardcore) for use under concrete floors and footpaths and that it meets with S.R.21: 2014 & A1:2016 guidelines.

#### 2.10.2. S.R.16:2016

The Professional Geologist's Report states: The material tested satisfies all testing requirements and has been declared suitable for SR16 end use. A geologist's statement is provided:

The Professional Geologist is satisfied that, subject to Certification by NSAI or another suitable body, providing grading specifications are met, based on his examination of the quarry, together with the chemical and physical test results supplied by the operator, material from Quarry M is suitable for use in Concrete and it meets with S.R. 16:2016 guidelines.

#### **2.10.3.** Site Visit

Geological Survey Ireland representatives visited the quarry in question and are satisfied that the report provided is accurate in relation to the assessment of lithologies. The visit to Quarry M confirmed that no on-site production of aggregate was taking place..

### 2.11. Quarry C

A visit to this facility confirmed that no on-site production of aggregate was taking place.

### 2.12. Quarry E

A visit to this facility confirmed that no on-site production of aggregate was taking place.

#### **2.13.** Quarry K

A visit to this facility confirmed that no on-site production of aggregate was taking place.



## **2.14.** Quarry D

A visit to this facility confirmed that no on-site production of aggregate was taking place.

## 2.15. Quarry Y

A visit to this facility confirmed that no on-site production of aggregate was taking place.

## 3. Concrete Products

### 3.1. Research Programme

Geological Survey Ireland is currently managing a joint research call with DHLGH on pyrite reactivity with draft final results due in Q1 2023. Interim findings have shown a correlation between pyrite morphology and reactivity.

Additionally GSI are managing the procurement of technical expertise and research in support of the review of IS465 by NSAI. The procurement process is ongoing with project commencements expected in Q4 2022.

### 3.2. Identification of Aggregate in blocks

A question has been raised in several technical meetings about assurances regarding the constituent aggregates in construction products, namely concrete blocks. While the aggregate stockpiles in the manufacturing facility have been tested, reassurance is sought regarding whether these aggregates are those that were in use in the manufacturing process.

While this is largely beyond the scope and qualifications of GSI personnel, it is recommended that the petrographic examination as specified in I.S. 465:2018+A1:2020 provides a robust framework for this evaluation. In particular where it is sought to clarify the use of a specific sampled aggregate, it is envisioned that Test Suite A as detailed in section 7.2 would be sufficient.

While it would be possible to carry out this inspection on an ad hoc and individual basis, co-opting the process as detailed in this document would allow for a more robust series of standardised investigations and ensure that adequate replication of results could be achieved.