Meeting of the Joint Oireachtas Committee on Housing, Local Government and Heritage 13 July 2023

Opening Statement – Geraldine Larkin, Chief Executive Officer, National Standards Authority of Ireland (NSAI)

I would like to thank the Committee for the invitation to assist in its consideration of issues in today's discussion. My name is Geraldine Larkin, and I am the CEO of the National Standards Authority of Ireland – NSAI.

I am accompanied by my colleagues, Ms. Yvonne Wylde, Head of Standards Technical and Dr. Ken Murphy, Senior Scientific Officer and Secretary to the NSAI Concrete Blocks Technical Committee. We are here today to assist you in your work and address any questions you may have.

In this session, we will give an overview of work that NSAI was requested to undertake by government, pursuant to its letter of 15th of February 2022, including a review of the I.S. 465 Standard.

At the outset, I would like to acknowledge the homeowners, representatives of whom this committee have already heard from today, and the impact that issues with defective concrete blocks have had on them. I would like to assure all stakeholders that NSAI and its technical committees, which are comprised of voluntary experts, have made, and are continuing to make every effort to expedite work while maintaining integrity of the process.

Review of I.S.465:2018 Standard and its Application

At our previous appearance before this committee in December, the NSAI confirmed that work is underway by the relevant NSAI Technical Committees to inform the revision of I.S. 465:2018 standard, and that this work will address requests by government to consider matters related to deleterious materials such as pyrrhotite, and other matters including questions around foundations and insulation raised by the Working Group on the Defective Concrete Block

Grant Scheme, which comprised a broad range of stakeholders including homeowners representatives, local authorities and government agencies.

NSAI also noted that the requested work is critically dependant on further technical information becoming available. NSAI can now advise that substantive progress is being made through the Defective Concrete Block Technical Matters Steering Group, chaired by the Department of Housing, Local Government and Heritage, to procure relevant data and research to advance knowledge for this work.

As a result, we can confirm that;

- research programs are now underway to establish the long-term impact of pyrrhotite, in walls, rising walls and foundations, which will inform consideration of the structural performance of retained blockwork post remediation
- analysis of Defective Concrete Blocks (DCB) grant scheme reports is underway and data gathering and analysis is continuing
- following an open call to identify other data sources, substantive data relating to dwellings currently outside of the DCB grant scheme has been recently procured and this data will be analysed in conjunction with data available from the relevant Local Authorities from DCB grant scheme applicants
- modelling of behaviour of full-fill insulated walls has been carried out and the results are being considered
- substantive progress has been made on establishing a research program to explore the long-term efficacy and longevity of alternative remediation options currently referenced in I.S. 465.

The output from these research programs will also be used to inform other questions raised by government, including the question of consistency of interpretation of test reports, and criteria defining categories for remediation.

Related Work being Undertaken

In conjunction with this work a review of the guidance associated with the design and construction of masonry concrete block walls is also being carried out. Research referenced above will inform the evolution of associated European and national standards and/or guidance, by providing further technical insight into performance of aggregates, blocks, and blockwork construction.

The revision of S.R. 325 - *Recommendations for the design of masonry structures in Ireland to Eurocode 6*, will be informed by an extensive range of climate-related research and data, procured, or being procured, including;

- recently updated climatic data from Met Éireann,
- the modelling of moisture ingress through concrete block walls,
- impact of freeze/thaw and other climatic conditions on the long-term integrity of masonry wall construction.

In its letter of February 2022, the government also requested NSAI to consider other matters, such as;

- provision of guidance on procurement, certification and traceability of concrete blocks,
- consideration of a minimum cement content for blocks,
- consideration of a maximum specification for content of deleterious materials, and
- a review of the impact of pumped cavity fill and related guidance in S.R. 54 Code of practice for the energy efficient retrofit of dwellings.

S.R. 54 is being revised following a systematic review and this, together with other work previously referred to will be informed by relevant learnings from the research programs underway.

It should also be noted at this point that experts serving on the NSAI Technical Committees for the above work are conscious of the need for timely updates of

work outcomes, and they therefore keep under continuous review the possibility of issuing interim guidance, should this be considered useful or proportionate.

Summary

NSAI understands fully its important role in relation to these standards and all standards developed by its technical committees right across the broad spectrum of standards for construction. I trust this statement has given you an overview of our work and we are happy to address any further questions you may have.