

The Victorian era is often hailed as the greatest period for the country's infrastructure, especially the unprecedented expansion of our rail networks to support the industrial revolution and move materials and people efficiently around the country.

Between the 1830s and 1900 there were more than 10,000 Acts of Parliament to create new railways and tram lines. But in this unregulated and entrepreneurial environment there were at least 60 different types of rail beams in use.

As the network developed this became increasingly problematic and the Government of the day recognised the need for legislation to standardise the railways to improve the operating performance of the rail network for users, but also the efficiency of manufacture of rail components that form the track and the rolling stock. Thus we saw the adoption of the first product standards, and the number of different rail beams reduced to just six.

Recognising the huge benefits of agreed standards for the manufacture of goods and services, and how they would speed up production and reduce costs, the Institution of Civil Engineers established the Engineering Standards Committee (ESC) in 1901 to develop a common language and approach, and protect the interests of developers and consumers.

One of ESC's most important early standards was for Portland cement. Such standards have played a crucial role in ensuring infrastructure dating back over 100 years remains in use to this day – arguably the very definition of sustainability.

The ESC received its Royal Charter in 1929 and subsequently became the British Standards Institution (BSI) the organisation tasked with improving quality, safety and wellbeing through standards development at a national, European and global level.

CEO VIEWPOINT

So why is this relevant?

Well, today the MPA nominates technical experts to sit and, in some cases, 'hold the pen' on over 100 BSI and CEN (European Committee for Standardization) committees. These forums represent a mind-boggling array of standards, codes and regulations for everything relating to mineral products, from the innumerable aspects of concrete and the intricacies of road surfacings, to the myriad of ways industrial minerals are used.

This is one of the most important roles carried out by the MPA and yet it's one of the least well known – and even less well understood – aspects of what we do, which is perverse given that standards underpin everything our members do.

Whether it's standards relating to design, products, production activities, transport, the environment, people or anything else, the MPAs presence on standards committees – and in some cases representative partner organisations – both here in the UK and in Europe too is critical to our 'licence to operate' and our 'licence to market'.

"It can take many years for product innovations and technical enhancements to make their way into standards"

Being an active part of these committees not only ensures that standards are realistic and reasonable but also enables the industry to seize opportunities to encourage sustainable development, whether that's helping to increase materials circularity or accelerate decarbonisation, as well as facilitate innovation, minimise risk and ensure safe processes and products.

One of the best recent examples of this is the revision of BS 8500 Concrete, the complementary British Standard to BS EN 206, to allow multi-component cements to be used in concrete – substituting Portland cement with a mix of steel slag, fly ash and limestone fines. This is something our industry has been pushing for years as it will allow engineers and architects to specify a new generation of lower-carbon mixes.

Another example is 2021's announcement by Highways England (now National Highways) supporting the use of Warm Mix Asphalt (WMA) as standard on trunk roads, after years of persuasion. WMA reduces the carbon emissions of asphalt and saves time and money, as well as reducing disruption for road users.

Of course the construction industry is known for its relatively conservative (with a small 'c') approach when it comes to accepting new products and practices – it can take many years for product innovations and technical enhancements to make their way into standards, and only then can the slow process of adoption begin.

MPA members go to great lengths, not only to ensure product standards are met, but also produce guidance to help architects and engineers to specify products that will deliver long-term performance.

And this is no small task. Planned updates to existing standards and codes are happening all the time, let alone new waves of legislation to be complied with. The volume and complexity is everincreasing, as is the potential for inconsistency and contradiction. Having a 'seat at the table' of standards committees is critical to help guide decision-making and, crucially, avoid the unintended consequences of well-intentioned but mis-informed revisions.

Standards are there to protect and serve the best interests of the taxpayer and consumer, as such, they must be developed with care and consideration. Standards committees must not succumb to price-led specifications, short-term fixes and greenwashing in place of genuine, long-term sustainable development.

Delivered in the right way, standards will help to ensure that the structures of today, built with modern materials, are still here in hundreds of years' time, just like the Victorian enduring infrastructure that we find around us.

Jon Prichard
Chief Executive