# **BSI British Standards Solutions Case Study**

PAS 402:2009 – Waste Resource Management – Specification for Performance Reporting



# Towards zero waste in Wales

### At a glance...

- Constructing Excellence in Wales (CEW) found that a lack of accurate and reliable waste reporting data was hampering the effort to minimize waste in Wales.
- CEW established that a Publicly Available Specification (PAS) from BSI would tackle this deficit in the necessary timeframe.
- Working with CEW, BSI recruited a Steering Group and 10 'pathfinder' companies to help develop the PAS.
- Using the draft PAS in the year leading up to launch, the pathfinder companies diverted more than 20,000 additional tonnes of waste from landfill.
- CEW has now started to gather reliable and detailed information on landfill diversion and waste recovery. This is helping to drive improvements in the way waste is dealt with and making a significant contribution to Wales' ambition to achieve zero waste 2050.

"The PAS enabled us to deliver standardization of a solution on a national platform. It's not something we think we could have done on our own. We've achieved a huge amount through doing it."

#### Emma Cottrell,

*Construction Waste Programme Manager, Constructing Excellence in Wales* 





### Key benefits of PAS 402

- In Year One, users of PAS 402 diverted 302,496 tonnes of material from landfill.
- By 2011 at least a quarter of the waste management companies in Wales will be using the PAS, diverting a projected 180,000 additional tonnes of waste away from landfill each year.
- Users have increased their efficiency and are winning more work because the PAS increases the confidence of their customers. Customers are also increasingly specifying the PAS in procurement requirements.
- CEW is achieving its target of accurate and reliable data which it can use in its efforts to minimize waste.

# Why did CEW approach BSI to develop a PAS?

Constructing Excellence in Wales (CEW) is charged with leading the effort to reduce construction waste in Wales. This type of waste is important because it represents 69%\* of the total controlled waste produced. This makes it central to achieving the Welsh Government's waste objectives.

When CEW started looking at the issues in the sector, it found that construction companies depended heavily on their waste management contractor for their recovery and landfill diversion data. This data was usually unverified, undermining accurate reporting of the industry's performance.

CEW realized that a standardized method for reporting what happens to waste was needed. This methodology would generate reliable data and create a foundation on which to build performance improvements ahead of new regulations.

### **Developing the PAS**

With BSI's help, CEW first had to define what the PAS would cover. It quickly found that 'construction waste' is almost impossible to classify – if a hospital is being demolished for example, the waste could include anything from demolition rubble to unwanted beds. CEW decided that the PAS must apply to every kind of waste.

BSI then established two groups to develop the PAS. A Steering Group was formed with representatives from academia, professional institutes, regulatory and policy bodies, and an inspection body – so that the final PAS could be used as the basis of an inspection scheme. A Pathfinder Group was put together from 10 waste management companies handling in excess of 500,000 tonnes of waste per annum [see box below].

After nine months of work the PAS was launched at the Welsh Assembly Senedd in July 2009, generating a great deal of publicity. CEW also sought and secured Welsh European Funding Office money to make more people aware of the PAS and its Green Compass inspection scheme. This has provided funding for an additional 50 waste management companies to use PAS 402 and prepare for inspections in 2011.

\*Source: Environment Agency, Building the future 2005-06. A survey on the arising and management of construction and demolition waste in Wales 2005-06.



### What is a PAS?

A Publicly Available Specification (PAS) is a fast-track standard developed by BSI through sponsorship from organizations wishing to create credible public standards. These standards are driven by the needs of the sponsoring organization or industry, while still being controlled by BSI's rigorous consensus-building processes to ensure credibility.

# The importance of the pathfinders

CEW wanted the industry to be involved in writing the PAS – both to make sure the final document was practical, and so that the industry would support it. Ten geographically dispersed 'pathfinder' companies were invited to take part, on the assumption that at least six would 'last the course' and give CEW sufficient industry input. In the event, all 10 pathfinders stayed with the project to completion, road-testing the PAS at every stage and advising on its feasibility. These companies now have a real sense of ownership of the PAS and are its strongest advocates within the Welsh waste management industry.



### How the PAS is helping

The PAS is helping Constructing Excellence in Wales to meet its objectives by providing reliable and actionable information which it can analyse both by type and by region. So for instance if more plastic is being recycled in South Wales than North Wales, CEW can look at the reasons behind that and identify for example a lack of plastics processing facilities in the north. This information can be used to advise and guide the Welsh Government.

The PAS is also closely linked to other CEW waste related schemes, such as encouraging the use of Recycled Aggregates for Minor Schemes (RAMS); to divert surplus construction materials from the waste stream; and to establish civic amenity type facilities at builders' merchants.

### Increased recycling

In itself the PAS is increasing the amount of waste which is recycled or reused, as waste management companies understand more

about what they are doing with waste and strive to increase their now visible recovery rates. In its first year of use up to July 2010, 50,000 additional tonnes of waste were diverted from landfill.

### **Business performance**

These companies are also reporting improved business performance. They are working more closely with their customers, increasing customer confidence. And because processes have been scrutinized – things like layouts and traffic plans – they have become more efficient.

"We are still looking at landfill diversion and recovery, but also are looking not to generate waste in the first place. It is a hugely different and challenging target and the industry is going to have to change. PAS 402 lays the foundations for that to be achievable." They have also benefited by working together to share best practice and are winning more work because tender documents are beginning to ask for PAS 402.

### Towards zero waste

Finally, and looking to the future, the 2010-2050 Wales Waste Strategy is called 'Towards Zero Waste'. Emma Cottrell, Construction Waste Programme Manager at Constructing Excellence in Wales notes: "We are still looking at landfill diversion and recovery, but also are looking not to generate waste in the first place. It is a hugely different and challenging target and the industry is going to have to change. PAS 402 lays the foundations for that to be achievable."

# The sponsor

Constructing Excellence in Wales (CEW) is funded by the Welsh Government to improve the performance of the Welsh construction industry. It supports projects which demonstrate the case for change and then publicizes the outcomes. CEW is especially interested in helping the Welsh construction industry to become more sustainable.

# **About BSI Group**

BSI Group is a global independent business services organization that develops standards-based solutions to improve management practices and promote innovation. BSI can help businesses, governments and other organizations around the world to raise quality and performance in a sustainable and socially responsible way. From its origins as the world's first National Standards Body, BSI Group draws upon over 100 years' experience to work with 69,000 organizations in 147 countries from its 50 offices. To learn more, please visit **www.bsigroup.com.vn** 

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