



**CASE STUDY:**  
Forward Commitment Procurement  
HM Prison Service Zero Waste  
Prison Mattress System

“The challenge is to use public procurement and public services to lead the way, shape the market for innovative solutions and equip society to meet the challenges of the future”. – *Innovation White Paper 2008: “Innovation Nation”*

“The outcomes of this pioneering project have exceeded all expectations from both a sustainability and financial savings perspective.”  
– *Geoff Sykes, Head of Procurement Compliance and Mattress Project Manager, MoJ.*

## Forward Commitment Procurement:

practical pathways to delivering innovation

### FCP Demonstration Project: HM Prison Service Zero Waste Prison Mattress System

Historically, the majority of waste mattresses and pillows from Her Majesty’s Prison Service (HMPS) were sent to landfill or incinerated as clinical waste. The increasing costs of disposal together with a drive to reduce volumes of waste to landfill driven by the SOGE targets brought this problem into focus.

HMPS worked with the DTI/DEFRA Environmental Innovations Advisory Group and OGC in the first Forward Commitment Procurement (FCP) demonstration project to deliver an innovative solution to this problem.

In line with the principles of FCP, HMPS identified their unmet need and consulted with the market to find a way to deliver their requirement in a cost effective way. This led to a fundamental shift in the procurement approach and, after trials, the procurement in March 2009 of a fully managed Zero Waste Mattress system, eliminating waste to landfill and savings estimated to be nearly £5 million over the life of the contract.



It was estimated that the volume of HMPS mattresses and pillows annually disposed of to landfill equated to 35 double-decker buses,"  
– Richard Hoy, HMPS Procurement Team

### The problem

In a typical year HMPS purchased around 53,000 foam mattresses and 48,000 pillows, and dispose in the order of 40,000 items due to soiling, misuse, and wear and tear. Each prison area handled their own arrangements for disposal through local contracts. Although the current specification was considered innovative at the time of its development, and operationally a success, the majority of 'end of life' mattresses were being sent to landfill, with the remainder classed as clinical or hazardous waste and incurred high disposal costs.

In short, the situation was environmentally unsustainable and the combined cost of supply and disposal was estimated conservatively to be in the region of £2.8 million per year. As well as the financial cost of this disposal, individual prisons were finding it increasingly difficult to have the products taken away by contractors due to the increasing demands on and restrictions on the use of landfill sites.

This practice was not only uneconomical but out of step with HMPS and UK Government sustainable development policy and goals, including those set out in Sustainable Operations on the Government Estate (SOG E) targets and Sustainable Procurement Action Plan (SPAP) objectives. To compound matters, disposal costs were also set to rise as a result of regulatory drivers, such as the European Union (EU) Landfill Directive, and EU Waste Framework Directive.

The situation required a radical rethink.

"The starting point for any FCP project is recognising that you have an unmet need that needs a solution and then deciding to do something about it." – Gaynor Whyles, Director JERA Consulting

### The Opportunity

With supply arrangements for mattresses and pillows being reviewed in 2006 ahead of re-tendering in 2007/8 HMPS took the opportunity to overhaul its arrangements for their supply, use and disposal.

Following the FCP process, first HMPS needed to establish their 'unmet needs'; HMPS and the FCP team thought carefully about what was needed, and described this in outcome terms to allow scope for innovation:

By 2012, HMPS wants all its mattresses and pillows not classified as hazardous waste to be recycled, repurposed or reused instead of going to landfill and to reduce to 2 per cent pa the number of mattresses disposed of as hazardous or clinical waste (and by the way it needs to cost less).

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Using the FCP market sounding and consultation process, HMPS made sure that the market knew about the requirement, had time to develop new supply chains and to innovate, and (critically) was convinced of their commitment to delivering the outcomes.

### Finding a Solution

HMPS issued a Prior Indicative Notice (PIN) in the EU Official Journal (OJEU) in October 2006 as 'A call for innovative solutions and information' announcing the market sounding exercise.

"The combined cost of mattress and pillow supply and disposal is estimated to be well in excess of £3 million per year. In short, the current solution is costly and environmentally unsustainable".  
– HMPS FCP Market Communication Document

The call was widely publicised among the supply chain with the help of intermediary organisations such as the Knowledge Transfer Networks and generated much interest. The Manufacturing and Materials Knowledge Transfer Network organised a one day workshop with the supply chain and academics to discuss the issue and explore solutions. By the end of the consultation period over 30 good quality submissions from across the supply chain including multinationals, SMEs and social enterprises were received.

The call for innovative solutions and information achieved the following:

- made HMPS unmet needs visible to the market
- stimulated a response from the market
- provided HMPS with information on a number of products and technologies that could contribute to achieving a zero waste system
- introduced ideas and options for managing end of life mattresses
- introduced a number of potential new suppliers
- catalysed a number of innovative ideas.

The responses presented a range of different routes to achieve the desired outcome and also included ideas to improve the overall operational and environmental performance.

A representative sample of these companies were invited to attend an information exchange in a supply chain workshop event on 23<sup>rd</sup> April 2007 'to explore means of delivering a zero waste prison mattress system'.



"The response of the supply chain has been excellent and has confirmed the value of this novel approach,"  
– Geoff Sykes, Head of Procurement Compliance and Mattress Project Manager, MOJ

“The success of this FCP demonstration project is due in no small part to the outstanding leadership and commitment on the part of the HMPS team, and has inspired others across the public sector, showing just how effective procurement and the FCP process in particular can be in bringing timely and cost effective innovative solutions into the market.”

– Dr Jonathan (Jack) Frost former Chairman of the Environmental Innovations Advisory Group and Chairman of the FCP Competition Project Board

## FURTHER INFORMATION:

For more information about this project or to find out more about FCP contact Karen Andrew on 0114 259 3128

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The workshop provided an opportunity for HMPS to explore with potential suppliers the technical, operational and commercial options available to deliver a zero waste mattress system and for suppliers to find out more about our requirements and how their products and know how might contribute to a total solution, as well as supporting the development of the supply chain.

The HMPS used the information gathered through the market sounding and supply chain workshop to inform their procurement strategy and decisions on the contracting approach.

“FCP involves being a demanding procurer, asking for what you want, not what you think you can get, and actively creating the market conditions that stimulate and enable to supply chain to deliver.”  
– Gaynor Whyles, Director JERA Consulting

As a result of the market engagement it was recommended in the procurement strategy that an OJEU competition was launched for the supply of a ‘Fully Managed Service for Mattresses and Pillows’ that was environmentally friendly, be at the very least cost neutral and achieve a Zero Waste solution by 2012.

### The Outcome

In March 2009, HMPS signed a supplier contract for a ‘Zero Waste Mattress and Pillow Solution’. Exceeding all expectations, this brings to a successful conclusion the first pioneering FCP demonstration project.

**Outcomes?** A zero waste mattress and pillows solution, sooner than expected and with significant cost savings – estimated to be in the region of £5 million over the life of the contract.

The results speak for themselves: innovative new covers will reduce turnover, and all but eliminate the need for clinical waste disposal; no end-of-life mattresses will be sent to landfill, but instead will be recycled into useful products.

### Next steps

It doesn’t end here; HMPS are committed to auditing the zero waste outcomes of the contract, and will look to continual improvement in performance of all aspects of the contract.

HMPS is now working with the Department for Business, Innovation and Skills FCP programme to build on the success of this project and develop a second Forward Commitment Procurement project.