

**Client** – Northern Ireland Housing Executive  
**Contractors** – Northern Ireland Heating Company (NIHCO) and H&A Mechanical Services

## Major heating contracts Northern Ireland

Movement for Innovation M<sup>4</sup>I



## 1<sup>st</sup> year report says quality-based selection works

Measured term contracts that could run for up to nine years have passed muster in their first annual review. Some 2800 tenants have benefited from their old coal fires being replaced with modern gas or oil systems at a cost of £9.1m. Contractors who won the work in a 70/30-quality/price assessment earned a bonus of £35k for high quality results.

The contracts are designed to promote stable, long-term relationships that will enable contractors to recruit, train and retain skilled workers and also develop a supply chain that gives better value for money. The Northern Ireland Housing Executive (NIHE) also seeks to lower total unit costs, cut down on wasteful administration and improve tenant satisfaction. NIHE's project manager Noel Edwards recalls how this project started: "We think in the past a lot of good contractors have been put off working for us because we always wanted the lowest price. Some were shocked when we told them we didn't want silly prices."

Stability is the key word for contractors. H&A's systems manager Dave Smith reports long-term contracts with suppliers, some jointly negotiated with NIHCO. "Job security is important to our suppliers and employees. The long contract means they understand the importance of quality in every job," he says. NIHCO's managing director Bill McCandless says: "There's simply no comparison with how we used to work with the Housing Executive. They're the most 'switched-on-to-Egan' public sector client in Northern Ireland."

### Measured results

**Keeping to budget** – Final accounts are, on average, within 0.3% of estimates, much better than the 5% target. This means that confidence in the estimates is high and inspectors are only required to carry out a sample inspection.

**Value for money** – Although average system cost is up by about 11%, the contractors are installing a better product and perform survey, tenant liaison and design services previously done by NIHE staff. Warranty period has doubled to 12 months. NIHE is looking to assess savings in repairs and maintenance and lower administration costs in the second year, particularly as maintenance extensions to these contracts kick in. The project manager is forecasting lower total costs by the end of the second year.

**Quality evaluation** – Quality performance indicators are impressive:

Criterion	Indicator	Target	Achieved
Timeliness	Installation within 9 months of agreeing sites	100%	100%
	Installation within 3 days of starting	90%	100%
Satisfaction	Tenant satisfied or very satisfied	90%	98%

95% of jobs were free from 'substandard' or 'at risk' defects and there were no 'immediate danger' defects recorded at all.

**Partnering** – Analysis of 34 questionnaires shows that many people believe partnering-style behaviour has improved relationships. But this view is not universally held, suggesting that this change has some way to go.

- ▶ *Estates managers*
- ▶ *Installation and maintenance contractors*

*Do you have problems with:*

- *Putting together a full design, installation and maintenance service?*
- *Reducing administration costs?*
- *Developing long-term relationships that permit you to make continuous improvement?*



(from left) Dennis Haskins of H&A, Noel Edwards of NIHE and Bill McCandless of NIHCO

### Lessons learned

- *Bringing design, installation and maintenance under one contract offers immediate improvements in quality*
- *Long-term reduction in total cost should follow*
- *Making and sustaining the attitude changes needed for partnering to achieve its full potential takes much more effort than expected.*



## The Rethinking Construction Strategy Model applied to this innovation

### 5 Drivers

Leadership
Focus on the customer
Product Team Integration
Quality driven agenda
Commitment to people

### 6 Processes

Product development	Production of components
Partnering the supply chain	Respect for people
Project implementation	Sustainability

### 10 Targets for improvement

Client satisfaction – product	Profitability
Client satisfaction – service	Productivity
Defects	Safety
Cost predictability	Cost
Time predictability	Time

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## The challenge

As an energy conservation authority, NIHE has a target to make a 34% cut in energy consumption in its 75,000 properties by 2006. Their strategy is to reduce heat losses and modernise heating appliances and controls. Relationships with heating contractors had been fragmented with many relatively short contracts spread across the area offices. They were keen to adopt the Rethinking Construction approach. Initial emphasis would be on quality-based selection for larger, long-term contracts with measurement against performance targets. Structured partnering arrangements would be added later.

## The solution

**The old scheme** – Previously NIHE administered some 30 annual contracts for supply and installation of heating systems and there were up to ten tenderers for each contract. NIHE did the design and the lowest bidder won. Despite the intense effort put into administration, the quality of the finished product was questionable. After a six-month warranty, the system and its problems were passed to a maintenance contractor.

**The new scheme** – Five areas would be served under three five-year contracts with up to four one-year extensions. The contracts would initially cover tenant liaison, survey (samples to be checked by the client), design, supply, installation and warranty. Long-term maintenance would be added when existing contracts run out.

**Contractor selection** – Despite the strong signal to tenderers of allocating 70% of evaluation scores to quality, only five of the nine bids were thought to address the quality issues as hoped. Tenants were represented on the review panel that looked at responses to questionnaires and method statements, and interviewed tenderers. Prices were compared using a five-year model that reflected anticipated volumes and the client's experience. In March 2001, NIHCO was awarded two contracts – Belfast, and Southeast and South. H&A Mechanical Services won the third contract for Northeast and West.

**Measuring performance** – Key performance indicators were agreed to measure timeliness, tenant satisfaction, quality, health and safety, and cost. The 'stick' was that payments would be capped at 5% over the estimate based on the contractor's survey. The 'carrot' was a potential 0.5% bonus for achieving performance targets.

**Contractors' response** – For the first time contractors were thinking about quality, not cheapest products. They rationalised designs and standardised components. This simplified installation and will reduce the cost of future maintenance. Contractors' tenant liaison officers, helplines, information packs and videos, and an active system of follow up visits transformed their relationships with tenants.

## How problems were addressed

Massive changes in attitudes and processes were demanded of contractors' and Housing Executive staff. Although there were meetings between NIHE central and area staff and a partnering workshop with the contractors, partnering in the sense of whole team involvement did not take root from the start. The first practical results were achieved when a steering group representing NIHE and the two contractors worked out one set of procedures and forms for use in all three contracts. It became apparent that systems at NIHE were inhibiting administration and prompt payment. NIHE secured EC funding towards developing an IT system to enable electronic processing of invoices. NIHCO's experience with this was helpful. But many other changes are still needed.

## Next steps

The contractors' next challenge is to make the work more profitable. A big factor is the cost of administering each job. NIHE is being driven in the same direction by sustained pressure on budgets. A more focused steering group has been set up to progress partnering over the next year. It will concentrate on three main issues - streamlining processes, key performance indicators and costs.

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## Related topics

Other examples of Rethinking Construction principles applied to housing upgrade and maintenance contracts can be seen in Housing Forum case histories: *Partners reveal secrets of maintenance success* (Broomleigh Housing Association) and *New angle on KPIs* (Gipsyville phases 6&7).

European Construction Institute: *A toolkit for the implementation of post-award, project-specific partnering.*

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is for the whole UK construction industry to create self-sustaining continuous improvement leading to **world class performance and better profitability**