

Efficient purchasing of laboratory supplies in Maynooth

NATIONAL UNIVERSITY OF IRELAND (NUI), MAYNOOTH

Procurement objectives

After an evaluation of the existing frameworks and consultation with stakeholders, the university realised that the tender processes for laboratory supplies could be aggregated. The existing situation involved a high volume of low-value transactions and multiple-drop deliveries on various days.

Users had traditionally placed requisitions and both expected and received next day delivery with an invoice directly related to each order. The challenge was to arrive at a specification that encompassed the operational requirements of the laboratories and research areas, while ensuring that statutory requirements for safety and quality were met. The overall requirement for quality goods at the right price in the right place remained a priority.

Criteria used

As part of the aggregation strategy, a single tender was launched with multiple lots to cover laboratory consumables, chemicals, molecular reagents and laboratory supplies. The technical specifications addressed the main environmental impacts associated with the ordering, delivery and invoicing process.

Technical specifications:

- Candidates must undertake to make all catalogues available online to facilitate online purchasing. Such catalogues must be formatted to include the university's agreed core-list costs, discounts and cost breaks.
- Costs quoted should include the cost of delivery on a minimum of a once per week basis. Candidates should identify any cost that would apply for any additional deliveries – this cost should be per delivery and not per order. Delivery must be made to the business unit, room and building stipulated on the order form. Exact delivery schedules will be agreed with the successful candidate(s).
- Candidates must undertake to remove all used drums, containers, pallets and packaging associated with their products at each delivery point.
- Candidates must provide a consolidated invoice each month for each department or school. Invoices must identify the responsible business unit and each purchase order number for each item on the invoice.
- Candidates are invited to submit further proposals that will assist the university in reducing its carbon footprint, either by way of product usage/proposal or process improvement.

Results

Evaluation of the tenders received showed an immediate reduction in cost from the consolidation of deliveries and invoices. The concept of reduced order and invoice documents resulted in considerable process savings. The delivery schedules dropped from up to 20 per day to less than 40 per week. The resulting reduction in traffic movement on campus and delivery traffic within buildings was noted with many favourable comments made by staff and students alike.

The reduction in the total number of orders, deliveries and invoices has been remarkable – despite an increase in the total volume of

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supplies being used by staff and students at the university. Annual orders dropped from 6,000 to 1,500, deliveries from 2,700 to 540 and invoices from 7,500 to 2,250 (see table below). All suppliers also participate in a recycling scheme for packaging and glassware.

Environmental impacts

The precise impact of deliveries in terms of CO₂ and other emissions is difficult to ascertain, however the dramatic reduction in the number of deliveries made and invoices issued can be seen from the below table comparing the situation before and after the tender.

	Requisitions		Orders		Invoices		Deliveries	
	Weekly	Annual	Weekly	Annual	Weekly	Annual	Weekly	Annual
2008 / 2009	200	6,000	200	6,000	250	7,500	90	2,700
2009 / 2010	300	9,000	50	1,500	75	2,250	18	540

Lessons learned

Prior consultation with stakeholders assisted the smooth transition to a more efficient and lower-impact process. The buyers willingly moved to a system whereby orders were placed through a single point on a bi-weekly basis. The supplier base readily co-operated and helped with the idea of providing a single consolidated monthly invoice per business unit, rather than an invoice per purchase order.

The university aims to expand this process to other product categories (janitorial and catering consumables) as contracts come up for renewal.