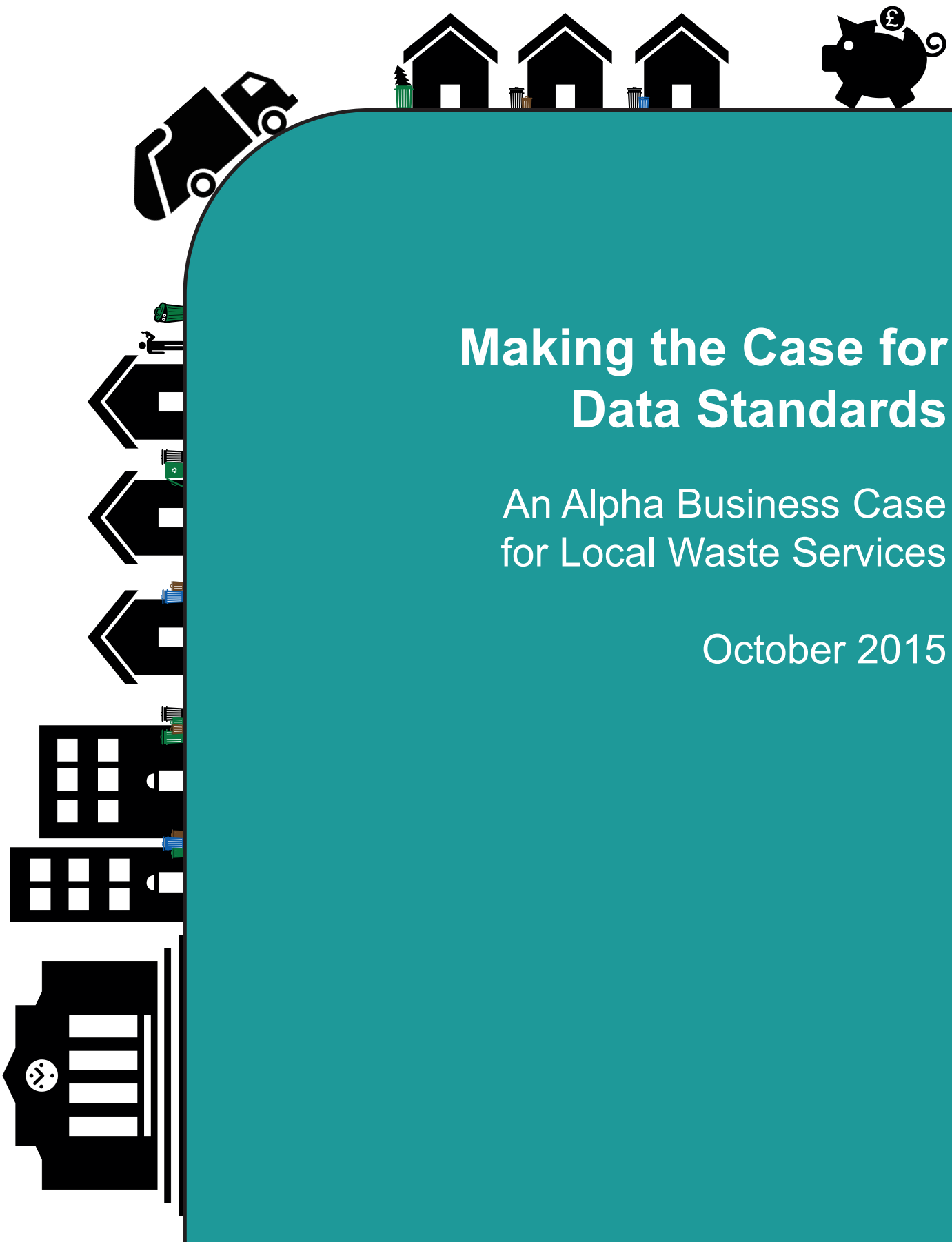
Department for Communities and Local Government

Local Digital Programme

#LocalDigital | @LDgovUK | www.localdirect.gov.uk



Making the Case for Data Standards

An Alpha Business Case for Local Waste Services

October 2015

ABOUT THIS DOCUMENT

As part of the alpha phase of the Local Waste Service Standards Project we have developed an initial financial model and this business case which aims to demonstrate the benefits to the sector of implementing data standards. You can watch a quick introductory video at bit.ly/WasteStandards.

We have focused on waste services, starting with a detailed analysis of the management of “missed” collections, and building out to look at all waste services. We have also touched on how these benefits might be realised across all local government services.

At this stage the model is mainly based on information gathered from the five local authorities participating in the project, as well as other interviews and some publicly available case studies.

The model is based on the national average number of households per local authority - which is 68,000 households. It is also based on a call-per-household ratio that was consistent across the majority of councils we looked at. This means that the underlying model can still work for councils with more or fewer households.

This document should be of interest to managers within individual councils or suppliers who want to make the case for standards internally, but also to those involved with national bodies or initiatives who want to understand the wider national benefits.

It is an “alpha” so we welcome thoughts or feedback.

EXECUTIVE SUMMARY

- We believe the use of shared standards for waste service data could unlock as much as £600 million in savings[1] nationally over a 7 year period.

- These savings could be made at the procurement, implementation and live running stages of waste service management, with the majority of savings coming from channel shift and more efficient handling of customer contact.

- Unlocking these savings would require a small investment in central coordination (£50,000 per year), with the additional option to invest in incentives to early adopters, or to all councils. An incentive to all councils, covering their data preparation costs, would cost the centre £3.5 million. Offering additional incentives to early adopters could cost up to £11 million.

- Councils themselves will also need to invest in developing their sites and systems to take full advantage of the benefits of data standards. However, they are highly likely to be investing in digital transformation already so any additional cost of adopting the standard will be a proportion of this. In addition, adoption of standards should greatly reduce the costs of that digital transformation, by reducing unnecessarily bespoke work.

[1] Full workings are available online here

CONTEXT

Often the inefficiencies and avoidable costs in the delivery of a service come when information or data has to pass between people or systems. This is as true in the digital age as it was in the days of filing cabinets and cashiers, but the inefficiencies are harder to spot for the layperson.

In an efficient service all the people and systems involved have a common understanding of the information they are dealing with, and are able to pass this information around and use it without having to explain or re-format anything. This applies not only to council staff and systems, but also to those of the partners and suppliers involved with the delivery of the service.

In order to achieve this efficiency all parties need to be working to common agreed standards, including a data standard. If this exists all parties can refer to it in their initial negotiations, in the design and delivery of solutions, and in their management reporting. Technical systems that are built with reference to the same standard can talk to each other more easily, without the need for intervention or manual work, unlocking further efficiencies. This kind of automated communication between systems is enabled by “APIs” (application programming interfaces).

Markets or sectors that adopt data standards therefore tend to be more efficient markets, as suppliers and clients know what to expect, removing the cost of bespoke work, and making it easier for either party to move between suppliers/clients.

APPLICATIONS IN WASTE SERVICE DELIVERY

During Discovery we worked with five local authorities and a range of suppliers and stakeholders to identify the common inefficiencies in the delivery of waste services. We were particularly interested in inefficiencies (or pain points) that might be addressed by the use of more standardised data.

Based on this work we have identified six areas where the use of data standards could save effort and therefore money. These are:

1. Enabling channel shift away from phones to online self service
2. Making it cheaper to develop and maintain the online option
3. Reducing the amount of manual processing of enquiries in the “back office”
4. Simplifying the relationship with suppliers and their systems
5. Simplifying the process of tendering for new contracts
6. Greater automation of reporting

1. Enabling channel shift away from phones to online self service

A possible saving of £49,000 per year per council, or £17 million per year across the UK.

It is more expensive[2] for councils to answer the phone than to process an online request, and they are therefore looking to drive the uptake of digital self-service.

Residents are more likely to self-serve online if it is quicker, more convenient, more accurate and more up to date than phoning. For example, the Waste Data Standard project are developing a demo online tool which will allow a homeowner to check why their bin hasn’t been emptied and what is being done about it - without having to ring up.

A tool like this relies on real-time information being passed between the collection team on the kerb, the council’s internal systems, and the website - which would be much easier to achieve if all of these were working to a common data standard.

We estimate that the average council spends £60,000 a year answering waste related phone calls, and that this could be reduced by 80% if all those who could self serve online did. Multiplied up across the sector that could be a saving of £17 million per year.

[2] 2012 Digital Efficiency Report. And in our model we have taken the Socitm guide of an average cost to a council of £3 to answer the phone and £0.15 for online

2. Making it cheaper to develop and maintain the online option

Potentially saving the sector £39 million in development costs.

Online tools like the one described above don't come for free. It costs councils to develop and maintain the digital tools and content on their websites.

Currently councils are developing or commissioning their own bespoke solutions, even for common services like reporting a missed bin collection. If all councils were working to common standards suppliers should be able to offer a cheaper[3] more standardised approach, and those councils that develop digital solutions in-house could reuse or refer to the work of other councils who have used the standard. This is a step closer to the concept of shared and/or re-useable components known as "government as a platform".

We estimate that councils spend up to £240,000 developing online forms for waste services, and then a further £120,000 a year updating these to reflect policy or scheduling changes. We believe they could save 50% of these upfront development costs if they were able to refer to common data standards and reuse existing components, and a further £90,000 per year in maintenance costs (because changes to e.g. business rules would be able to pass more easily between systems).

However this would only become the case once standards are in place and the early adopters have developed tools and services that others can refer to and reuse. The early adopters would therefore have to invest upfront to unlock later savings for others. (see *Invest to save* below for suggested incentives).

3. Reducing the amount of manual processing of enquiries in the "back office"

Potential annual saving of £251,000 per council and £88 million across the sector.

Once a resident has contacted the council about a missed bin (via phone or online) this needs to be investigated by a member of staff, and, if required, the collection of the waste needs to be scheduled with the collection team.

[3] We don't yet have data to support this, and would welcome input from digital suppliers

The process followed by council staff is often frustrating and inefficient: they might need to log in to more than one system, or they don't have access to information from the kerbside, or that information is available but it's too slow or out of date, or handed to them in paper format.

Even where councils have invested in in-cab technology - which should enable the collection team to log issues electronically and pass that to customer services - we heard that this data is often incomplete, or it turns up too late, or it's in a separate system that's slow or inaccessible to council staff.

We estimate that the sector currently spends £107 million per year investigating and processing waste related calls, and that £88m of this could be saved annually by eliminating re-keying, reducing the time spent looking for information, and reducing the number of calls back to residents.

4. Simplifying the relationship with suppliers and their systems

Potentially saving almost £50 million in integration costs for the sector.

When a council starts to work with a new supplier - either a supplier of waste services, or a supplier of the enabling technology (e.g. Customer Relationship Management or in-cab computers), there are costs associated with getting their systems to work together.

These costs tend to fall into two buckets: firstly the costs associated with cleaning up and digitising data so that it can be pass between systems (£10,000 per council) and secondly the cost of the development work needed to get the systems to work together (known as integration costs and estimated at £300,000 per council).

If councils and their various suppliers could refer to common data standards this would simplify the work needed to integrate their systems, and also make that work more predictable. (A common complaint from suppliers at the moment is that there is always more work than anticipated once they get into a council and look at their data and systems.)

If a data standard was introduced councils would still need to spend the £10,000 on data preparation - but having done this once they wouldn't have to repeat it when they moved suppliers. i.e. it would be a one-off cost to make their data compatible with the standard. This one-off cost could potentially be covered by any central body wanting to incentivise take up (see *Invest to save* below).

However, we estimate a council could save 50% of their other integration costs if all the suppliers involved were working to a common standard, and using common APIs. That's £150,000 per council and £49.5 million[4] for the sector.

5. Simplifying the process of tendering for new contracts

On average councils re-tender their waste contracts every 7 years. That means that in any one year about 50 councils are starting this process. Anecdotal evidence from councils, suppliers and trade bodies suggests that this is usually a rather lengthy and expensive process for all involved, with a lot of detail being specified and discussed.

We believe that reference to agreed common data standards could simplify this process, and reduce the amount of detail that would have to be specified and negotiated in each case. We have estimated that this would reduce the staff and consultancy time by 20% or £28,000 per council[5], but we would welcome more robust data from councils or suppliers who have been through this process recently.

6. Greater automation of reporting

We have also heard a lot of anecdotal evidence that council staff are spending many days each quarter manually collating data about the performance of waste services to send in to Defra and the Environment Agency. This often involves cutting and pasting data between spreadsheets.

If all councils and suppliers were working to a common data standard this would enable greater automation of reporting. We don't yet have enough information to make the financial case for this, so would be interested in hearing how much time (and therefore money) councils are currently spending on this activity.

---

[4] This assumes that the first 20 councils to make the move (the early adopters) won't benefit from the savings, but that the remaining 330 will.

[5] Based on the assumption that the equivalent of two FTE at £40,000 each spend a year involved with procurement, with an additional consultancy fee of £5,000 per month. This would be a mix of waste service staff, procurement staff and technical staff. This gives a total cost of £120,000, of which 20% might be saved by referring to standards.

INVESTING TO SAVE

We recognise that the real benefits of a standard may only be realised once it really is “standard” i.e. when enough councils and suppliers adopted it. This suggests that the first councils to use the standard to redesign their services might have to do more work (and spend more) than those that follow after. These would be the “early adopters”.

We have acknowledged this in our model by assuming that only 330 of the 350 councils will realise the full savings.

One way to incentivise take up would be for a central fund to subsidise these early adopters. We have estimated that this might be an investment of £11 million to support the first 20 councils.

An additional, lower cost way for a central body to incentivize the uptake of a standard would be to offer to cover this £10,000 data cleansing cost for councils - an overall investment of £3.5 million.

We also believe that the ongoing development and promotion of a national data standard would need some central investment and coordination. We have estimated an annual cost of £50,000 per year to cover this. This might pay for someone to convene users and stakeholders, manage ongoing development, and even perhaps work with councils and suppliers as they negotiate new contracts, to ensure the standard was included.

NEXT STEPS

The Local Waste Service Standards Project aims to demonstrate and better understand the feasibility and benefits of waste data standards by developing an “alpha” standard, and testing it with a small number of councils (the “beta” phase).

We will feed any learnings from this back into the next iteration of the financial model and business case, and would also welcome any input from other councils or suppliers working in this space.