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DEFRA WASTEDATAFLOW

WASTEDATAFLOW MID-CONTRACT REVIEW



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EXECUTIVE SUMMARY

This document reviews the first half's performance of EnviroS under the WasteDataFlow management contract for 2006/8.

The main aim of WasteDataFlow is to provide accurate and timely data and information on municipal waste. The system is in place to provide this service for all of the UK. The contract under review is for software and helpdesk to all the UK, but validation and training support only for England.

The WasteDataFlow system is available to Wales, Northern Ireland and Scotland. There were problems sometimes with the support to these National Agencies however improvements have been made during the year and continue to be made. The target of accurate timely data on municipal waste for England is being met to a high standard.

As the section on validation shows, in figures 5 to 8, the vast majority of data, to a good quality was delivered each quarter during the year. Those quarterly returns validated after the deadline were delayed to improve the quality of the data. By the quarter 4 deadline 1,569 returns were in. The 7 outstanding were validated within the week, over a month earlier than in the previous year.

To be truly successful WasteDataFlow must meet the needs of Local Authorities. This includes easy data entry, good support and useful, practical outputs. This has not always been the case but this year has seen improvements. We have improved the data entry side of WasteDataFlow with a new question selection and exclusion screen. We have given Local Authorities more tools with which they can validate their data and, with these tools, they can gather Mass Balance and BVPI information. We have also reviewed our helpdesk practices to keep advice consistent and accurate.

For all stakeholders the reporting system is the key to the value of WasteDataFlow. During this year a new reporting mechanism has been introduced that will allow Local Authorities, National and Regional authorities and the general public to access Excel based reports on performance indicators and general municipal waste analysis.

Overall there has been learning and improvement on the software, the helpdesk support and training and on the validation of Local Authority data. There has been a need to improve the support processes for the National Authorities in Wales, Northern Ireland and Scotland, and this has been implemented.

1. INTRODUCTION

Summarised below are the topics covered in the mid-contract review

Table 1 **Topics for review**

Topic	Specific elements
Project management	Overall level of support including particular strengths and areas for improvement. Including systems to facilitate sharing information between defra and enviros
	Monthly reporting – including content and structure Budgetary performance and review of 2007/08 budget
Helpdesk	Overall performance – including any feedback received by defra Helpdesk procedures
Training	Training programme, approach and options for 2007/08 Performance indicators
Validation	Procedures (including options for improving efficiency) Validation checks and tolerances
	Annual questions Communications plan
Communications	Delivery of communications plan, including; Success in achieving the original aims and objectives Overall system performance – including downtime, bugs etc 2006/07 development – what, why and impact
System maintenance & development	Development delivery including: Tracking development progress Timeliness of development delivery Options for improving development delivery



2. PROJECT MANAGEMENT

2.1 Overall level of support

Defra View

Enviros and Defra have built a very positive, constructive and open relationship during the WasteDataFlow project. This has significantly contributed to the success of the system to date. The overall level of project management support provided by Enviros during the first year of this new contract was generally good. Bringing a new resource into the central Project Management role was an excellent step and this produced a noticeable improvement in the PM of the project. There have however been some inconsistencies in the quality of support provided. The project manager has been pulled in too many different directions on occasion and this has had a direct impact on the focus and momentum of the Enviros team. Repeated reminders for completion of tasks have been required and some deadlines not met, but on other occasions the responsiveness and quality of the work has been beyond expected.

Improvements need to be made to the communication of progress on key tasks. In particular, the devolved administrations and the Environment Agency have all expressed frustration with key tasks not being completed on time, and lack of communication regarding this. This is also reflected in the difficulties of delivering the development programme.

Enviros View

In January the new Project Manager moved from being the development lead within the Enviros team to being the overall Project Manager, also covering the development side. During April he managed the process of moving one of the team from being a key Validator to the lead of the validation task, replacing the previous individual. Being lead on validation means being responsible for the coordination of the team, meeting of deadlines and the quality of the validation.

The previous lead, whilst relinquishing validation remains a main stay in terms of BVPI and definitions support, and supporting the validation team in our busy periods.

During the last part of the year the training and helpdesk coordinator left the Enviros business. We were able to move one of our good and enthusiastic helpdesk team up into the helpdesk coordination role.

There have been periods where the Project Manager (PM) has been pulled away from WasteDataFlow, and here the project management quality has been adversely impacted, especially around development based issues where there is a need for greater cover in the team.

The project director (PD) has ensured that the overall project keeps on track. Going forward the PD is actively working to bring new people into the Enviros team at all levels to ensure the service levels in helpdesk, validation, training and IT. Similarly the PM and Validation Lead have kept a supply of resource into the project from within Enviros.

That said the changes of staff outside of those named above has been very small, with only four leavers from an overall team of around twenty.



2.2 Monthly Reporting

The monthly report provides a clear picture of the status of returns, a summary of the IT development, communications within the month, helpdesk activities and information from the developed administration (when provided).

From the Enviro's point of view the report is relatively straight forward to prepare. However the questions that need to be addressed are:

- Does the current report meet Defra's requirements?
- Does it provide the management board with the information they need?

Potential areas for greater detail/improvement could included

- Greater detail on IT development, though this could be part of new monthly report providing greater detail on tracking IT delivery. (See Section 6);
- Improved analysis of the helpline activity, once the new database is full operational; and
- Greater analysis of the external users, i.e. who is using the system and how often.

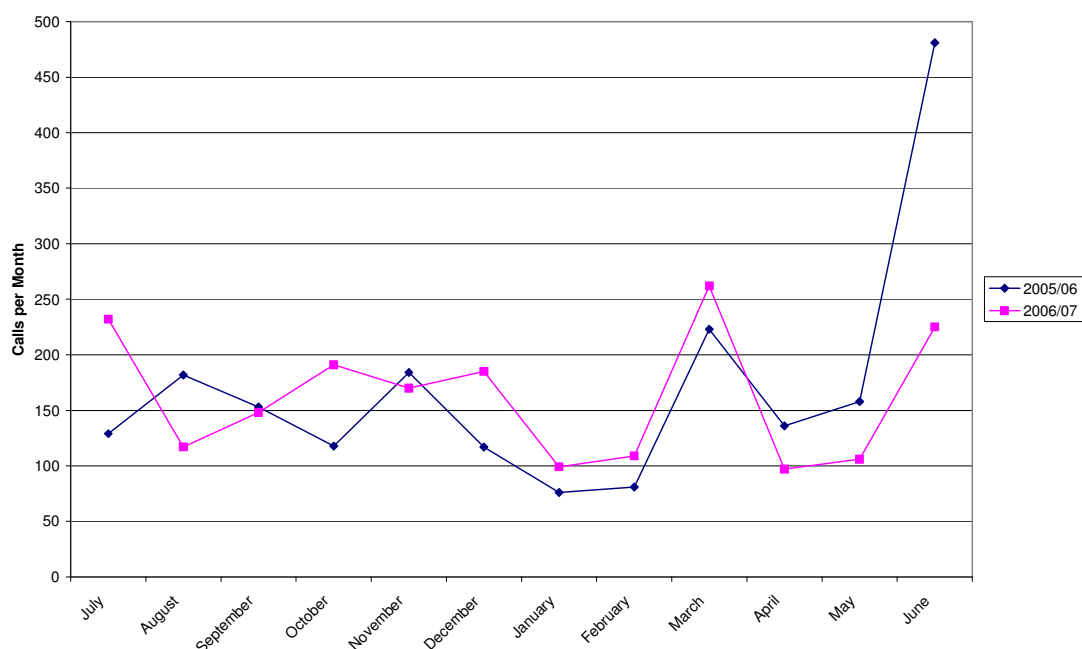
In considering any changes to the reporting requirements any additional time required should also be considered determine if the additional reporting will make provide significant benefit to those using the information.

3. HELPDESK

3.1 Overall performance

In 2006/07, the helpdesk received 1,941 calls compared to 2,038 calls in 2005/06. Figure 1 compared the calls received in 2005/06 and 2006/07 by month and show that while the general patterns are similar, June 2006 has a significantly greater number of calls compared to other months. This is likely to be as a result of the Quarter 4 deadline for the first full year of LATS.

Figure 1 Helpline Calls per Month 2005/06 and 2006/07



Since March 2006, the time recorded against helpdesk activities has been report. The time recorded covers all helpdesk activities, including the time on calls, the time spend resolving issues that could not be answered immediately on the telephone and time spend responding to e-mail queries.

Figure 2 shows the average amount of time spend on helpdesk activities against the number of calls received. It shows an increasing trend in the average time per call. However this crude analysis does not take account of the complexity of the call or importantly the number of e-mails received.

Table 2 provides a breakdown of helpdesk calls by country and shows, as would be expected, that calls from English authorities account for the majority of the calls to the helpdesk, being responsible for 92.5%.

Table 3 and Figure 3 provided a breakdown of the call and the duration of the calls. Table 3 highlights that the time spent on a call is reducing as a proportion of the total time spent on helpline activities, potentially indicating that helpdesk enquires are becoming more complex. This could be as result of the calculation of BVIPs through WasteDataFlow, which has caused a number of enquires about how the figures are derived.

Figure 4 provides a summary of the type of queries received by the helpline during 2006/07.

Figure 2 Average time spend on helpdesk activities against the number of calls

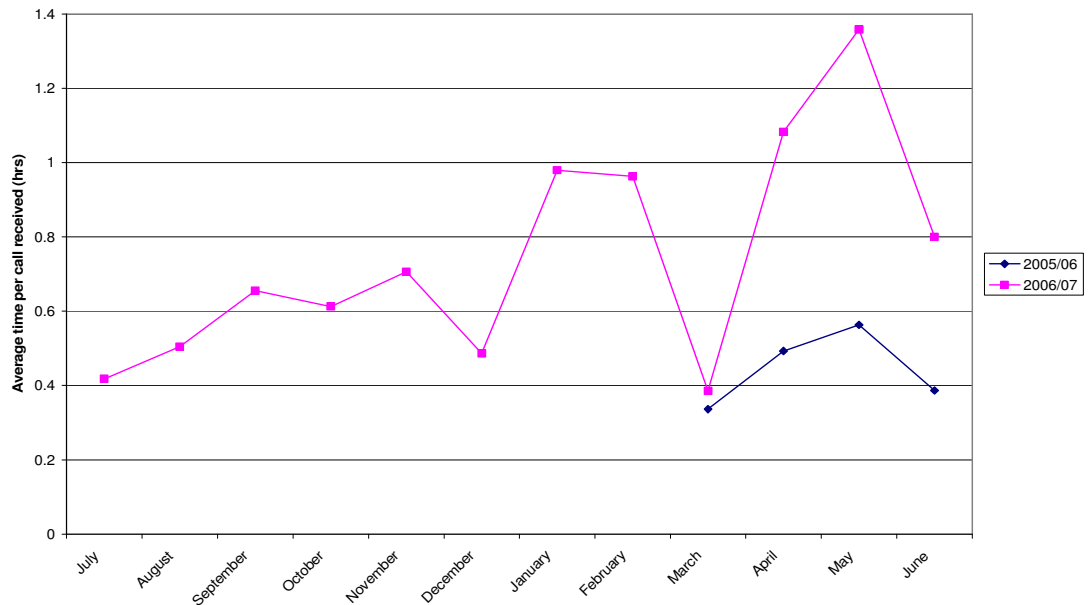


Table 2 Breakdown of Helpdesk Calls by Country

	England	Wales	N. Ireland	Scotland	Total
Jul-06	223	5	2	2	232
Aug-06	96	3	14	4	117
Sep-06	137	2	8	1	148
Oct-06	185	2	1	3	191
Nov-06	152	6	10	2	170
Dec-06	173	0	2	10	185
Jan-07	92	2	2	3	99
Feb-07	93	1	10	5	109
Mar-07	239	13	9	1	262
Apr-07	85	1	4	7	97
May-07	103	0	1	2	106
Jun-07	218	1	0	6	225
Total	1796	36	63	46	1941
Percentage	92.5%	1.9%	3.2%	2.4%	



Table 3 Breakdown of Call Duration

	Call Duration								Total time on calls	% of Helpdesk Time
	5	10	15	20	30	40	50	60		
Jul-06	76	48	73	19	9	3	1	3	49.3	50.8%
Aug-06	35	35	26	13	5	2	0	1	24.4	41.4%
Sep-06	59	26	37	12	10	2	1	1	30.7	31.6%
Oct-06	74	39	39	29	9	0	0	1	37.6	32.1%
Nov-06	61	48	27	25	6	2	1	0	33.3	27.8%
Dec-06	80	45	39	12	6	1	2	0	33.3	36.9%
Jan-07	42	25	8	12	6	1	0	5	22.3	23.0%
Feb-07	17	40	24	19	7	0	1	1	25.8	24.5%
Mar-07	99	63	41	35	21	2	0	1	53.5	53.0%
Apr-07	30	28	24	12	1	0	1	1	19.5	18.6%
May-07	32	37	18	9	5	2	1	2	23.0	16.0%
Jun-07	144	32	24	0	22	2	0	1	36.7	20.4%
Total	749	466	380	197	107	17	8	17	1941	
%	39%	24%	20%	10%	6%	1%	0%	1%		

Figure 3 Breakdown of Call Duration

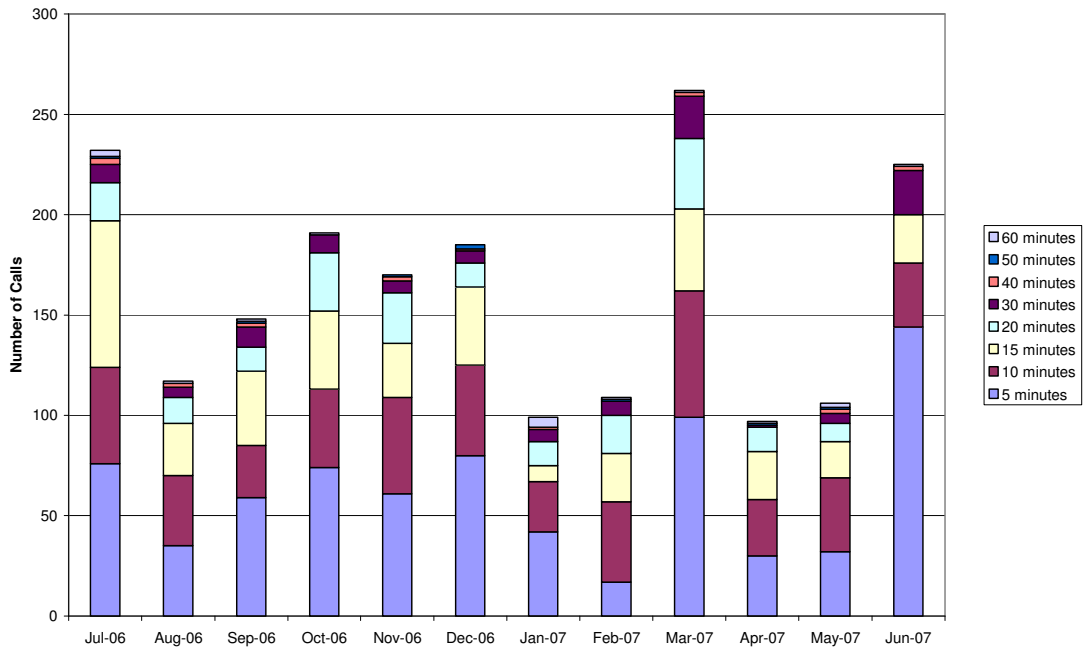
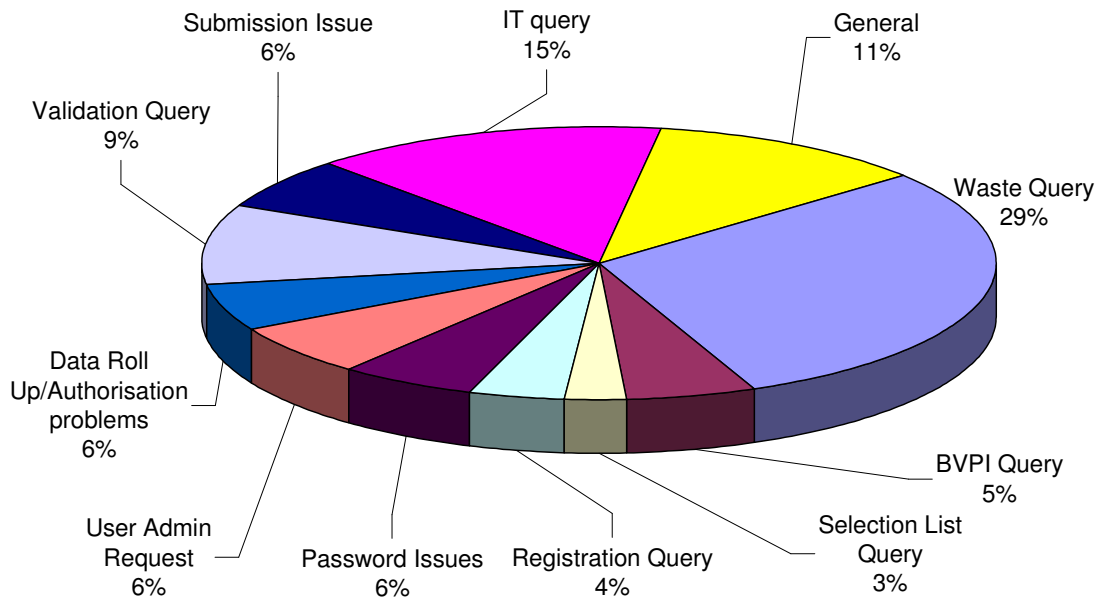


Figure 4 Summary of Helpline Queries by Type 2006/07



The review of the data used to monitor helpdesk activities has highlighted that the data currently available does not allow a sufficiently detailed analysis of helpline activities. Therefore it is proposed that a new set of indicators are developed to monitor the helpdesk with the introduction of the new helpdesk database. Although we need to ensure that any reporting requirements do not place an administrative burden that increase the time spent on the helpdesk.

With the new system we have re-categorised the calls. They are grouped into Waste Queries, BVPI queries, Software Operation and Bugs. Within each main category there is a level of breakdown.

Currently we are able to log the call and estimate the time on the call. We measure the overall helpdesk time from a daily time sheet entry. The software, once in full use, will also help us log the time on each call more accurately.

We will also be more able to log, for calls not resolved within the call, how long these take in terms of calendar days.

3.2 Helpdesk procedures

Overall the helpdesk procedures are working well but will need to be reviewed as part of the introduction of the new helpdesk database, and have been modified during the year. During the year there have been cases of Local Authorities (LAs) reporting conflicting advice coming from the helpdesk. On occasions the advice given to LAs has appeared, but not been, conflicting due to the complex nature of the queries: what seems the same situation when discussed at a broad level differs in the detail sufficiently for the answer to change.

On some occasions inconsistent advice has been given. This has not happened too often, but was caused by poor communication between the helpdesk team and poor use of the available knowledge bases. The helpdesk should be giving consistent advice, and so we introduced a help-desk manual. This is a hard-copy



booklet of standard responses and explanations that is used and updated by the helpdesk team. The booklet is located on the desk of the on-shift helpdesk operator. We are also more vigorous in ensuring that the helpdesk team communicate often and copy each other in on useful emails etc.

Suggestions have been made that a Local Authority be allocated to a help-desk person. This would unfortunately be impractical for both us and the LA. During the year we operated a team of on average 7 people. Given the volume of calls we have one person on the phones per half-day shift, if it gets busy others will contribute if they are available. When not on shift the help desk team are working on other Waste projects or other parts of WasteDataFlow. Dedicating LAs would either mean increased costs to keep all helpdesk team available just in case, or limiting the days when an LA could phone.

For training we are investing in a web-conferencing service (see the Training section). This is also a tool which may prove useful in diagnosing some of the helpdesk calls. Using the tool we will be able to connect to the Local Authorities computer and show them our screen, whilst talking through the call. If necessary we will also be able to switch it so the LA is showing us their screen. With this the helpdesk will be able to watch the process, see the error messages etc and so avoid lengthy 'explain what you are doing' conversations.

4. TRAINING

4.1 Training programme

The 2006/07 WasteDataFlow training consisted of two different types of workshops:

- Basic; "Understanding and using WasteDataFlow"; and
- Advanced: "Uses of WasteDataFlow and Specific Data Issues Workshop"

There were a total of 10 Basic Workshops and 9 Advanced Workshops held during 2006/07, Table 4 provides a summary of the locations and number of attendees.

Table 4 Summary of 2006/07 Training

Dates	Location	Basic LAs attending	Advanced LAs attending	Total LA
20 September 2006	North West	10	12	22
27 September 2006	South West	17	11	28
11 October 2006	West Midlands	4	15	19
28 November 2006	Yorkshires and Humber	11	No Advanced provided	11
30 November 2006	South East	14	13	27
6 December 2006	South East	11	7	18
7 December 2006	East England	9	14	23
6 March 2007	South East	6	8	14
13 March 2007	East Midlands	8	9	17
17 April 2007	North East	10	12	22
	Totals	100	101	201

Overall the workshops were well received and positive feedback was given by the delegates. The feedback forms last year were paper copy and so no overall database of analysis is available (this year it is electronic feedback). However a review of all forms for a sample of courses between February and March 2007 shows the vast majority of respondents found the course good or very good, see table 5.

Table 5 Training course feedback

6 Courses	Very Good	Good	Fair	Poor	Total
Relevance of presentation	15	15	1	0	31
Level of detail	7	22	2	0	31
Style of delivery	11	17	3	0	31
Quality of material	9	16	5	1	31
Organisation of event	8	19	3	1	31
Overall Impression	8	18	5	0	31
Total	58	107	19	2	186

The comments sections were generally blank or positive, where negative there were three trainees who would have liked more or less detail. There was one instance of dissatisfaction with the parking arrangements. Both these concerns will hopefully more easily addressed going forward with the new approach for 2007/8.

4.2 Approach and options for 2007/08

Over the previous two years the training for new and advanced WasteDataFlow (WDF) users has been done in a series of regional face-to-face training days and half-days. This has not always been efficient given the wide geographic spread of the users and the different knowledge levels they have of WDF. To overcome these difficulties we introducing training via web-conferencing, supported by perhaps quarterly face-to-face sessions if required.

The web-conferencing sessions will allow a single WDF trainer to:

- Interact with up to 15 logged-on delegates at a time. This is an improvement on the classroom approach which for practical reasons was limited to 8 computers. We will have the ability for 5 WDF trainers to operate, even at the same time.
- Deliver quality and appropriate material in shorter sessions, which in itself means we can offer
 - more frequent training
 - training around news or new releases in the software

The approach above also brings significant benefits to the Local Authority (or even the National, Regional and External users who could be trained in the same way). The trainee will spend less time on the training as

- the sessions are shorter
- they will not have to travel

The tighter focus of the training sessions should also mean that the trainees are more likely to be in a session suitable to their needs. And if the session turns out to not be suitable, they won't have incurred travel time and be out of the office.

We will continue to offer basic and advanced user courses over the web conferencing, but these will be augmented by specialist sessions on 'hot-topics' of the moment. Eg BVPIs, LATS, new developments.



Each session will be put together with a summary one pager and trainer notes. The target length will be about an hour. We have trialled the technology and approach with a small group of Local Authorities and it was very positively received. The same approach (although using a different software tool) is used by many Defra departments.

There is also a plan to maintain up to 4 face-to-face sessions that would be delivered in two fixed locations: Manchester and London. These would be offered to the WasteDataFlow community for delivery in 2008, once feedback from the on-line courses has determined whether or not they are necessary.

5. VALIDATION

5.1 Performance Indicators

There are a range of indicators that are used to assess the performance of elements of WasteDataFlow.

5.1.1 Timeliness of Quarterly Returns

The pattern of when Local Authorities submit their returns can be assessed by looking at when returns first reached Level 30 during a quarter (see Table 6). The pattern is reasonably consistent with between 76% and 81% of all returns begin returned in the last month of the quarter. In addition between 42% and 47% of all returns were returned in the last week of the quarter, with the exception of Quarter 2 where the figure was 13% which would be a result of Christmas. Table 7 provides the same information broken down by authority type.

Table 6 Summary of when Local Authority Returns 1st Reached Level 30

	1st Month	2nd Month	3rd Month	In last week of quarter	Not reaching by deadline
Q1	14	37	309	172	34
Q2	22	45	301	53	26
Q3	8	32	325	164	29
Q4	7	55	321	185	11
Total	51	169	1256	574	100
	1st Month	2nd Month	3rd Month	In last week of quarter	Not reaching by deadline
Q1	4%	9%	78%	44%	9%
Q2	6%	11%	76%	13%	7%
Q3	2%	8%	82%	42%	7%
Q4	2%	14%	81%	47%	3%
Total	3%	11%	80%	36%	6%

Table 7 Summary of when Local Authority Returns 1st Reached Level 30 by Authority Type

	Authority Type	1st Month	2nd Month	3rd Month	In last week of quarter	Not reaching by deadline
Q1	WCA	14	25	196	107	38
	WDA	0	6	33	21	1
	UA	0	6	66	47	9
Q2	WCA	18	37	188	28	30
	WDA	4	3	32	6	1
	UA	0	5	71	19	5
Q3	WCA	7	22	222	105	22
	WDA	1	3	34	18	2
	UA	0	7	69	46	5
Q4	WCA	7	42	216	129	8
	WDA	0	4	36	21	0
	UA	0	9	69	40	3
Total	WCA	46	126	822	369	98
	WDA	5	16	135	66	4
	UA	0	27	275	152	22
	Authority Type	1st Month	2nd Month	3rd Month	In last week of quarter	Not reaching by deadline
Q1	WCA	5%	9%	72%	39%	14%
	WDA	0%	15%	83%	53%	3%
	UA	0%	7%	81%	58%	11%
Q2	WCA	7%	14%	69%	10%	11%
	WDA	10%	8%	80%	15%	3%
	UA	0%	6%	88%	23%	6%
Q3	WCA	3%	8%	81%	38%	8%
	WDA	3%	8%	85%	45%	5%
	UA	0%	9%	85%	57%	6%
Q4	WCA	3%	15%	79%	47%	3%
	WDA	0%	10%	90%	53%	0%
	UA	0%	11%	85%	49%	4%
Total	WCA	4%	12%	75%	34%	9%
	WDA	3%	10%	84%	41%	3%
	UA	0%	8%	85%	47%	7%

Figures 5 & 6 shows the reporting profiles of when returns reached Level 30 for both 2005/06 and 2006/07. The graphs highlight a significant improvement in the timeliness of returns reaching Level 30 by the quarter deadline.

Figure 5 Profile of Returns Reaching Level 30 – 2005/06

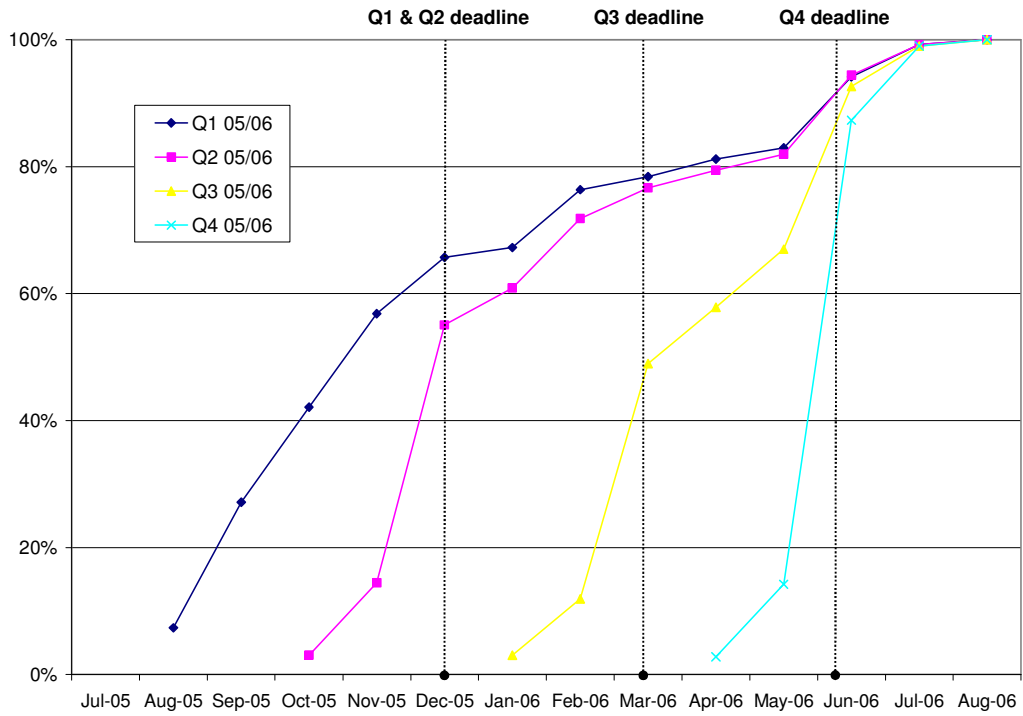
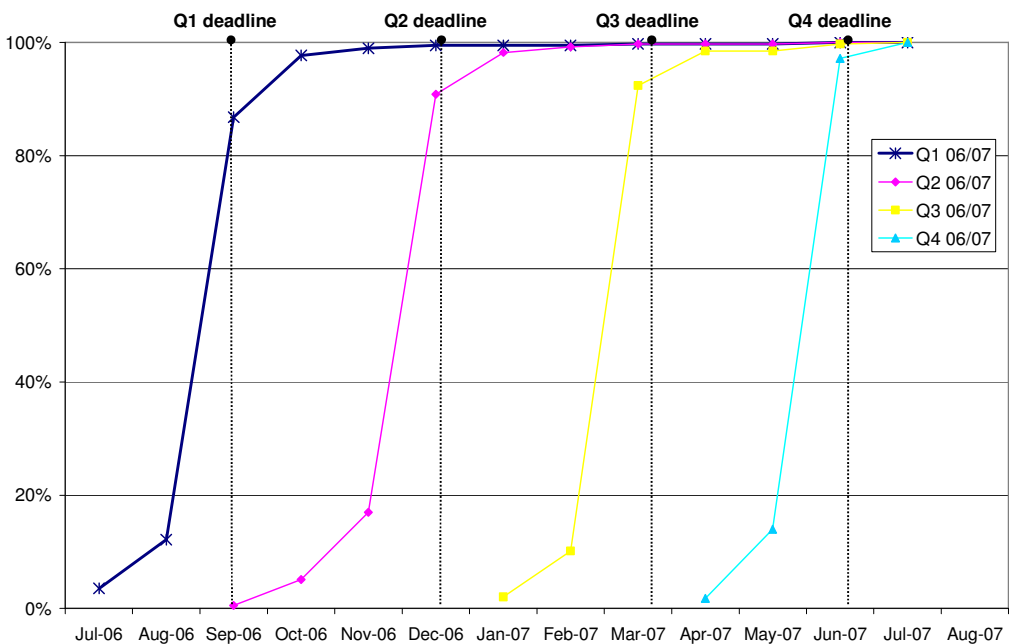


Figure 6 Profile of Returns Reaching Level 30 – 2006/07



5.1.2 Quality of Quarterly Returns

The standard of data submitted by Local Authority Users can be assessed by considering:

- Number of local authorities whose returns are rejected per quarter by authority type; and
- Number of validations required per quarter by authority type.

Table 8 summarises the number of returns that have been rolled down Level 30 at least once. However, it is not possible to determine whether the validator or the local authority initiated the roll-down.

Table 8 Number of Return Rolled-down at Least Once

Quarter	Authority Type	Rolled down at least once	Total	Percentage
Q1	WCA	231	338	86%
	WDA	38		
	UA	69		
Q2	WCA	192	286	73%
	WDA	30		
	UA	64		
Q3	WCA	202	288	73%
	WDA	25		
	UA	61		
Q4	WCA	156	216	55%
	WDA	17		
	UA	43		

The number of validations required per quarter is best calculated by counting the number of times a return “climbs” to Level 30. Table 9 summarises the average number of times returns climb to Level 30 by quarter and authority type.

Table 9 Average Number of “Climbs” to Level 30 by Quarter and Authority Type

Authority Type		Q1	Q2	Q3	Q4
WCA	Average	3.0	2.4	2.4	2.0
	Maximum	10	9	12	7
WDA	Average	3.1	2.3	2.1	1.5
	Maximum	7	6	5	3
UA	Average	3.1	2.6	2.7	2.0
	Maximum	10	7	11	5
Total		3.0	2.5	2.4	1.9

5.1.3 Level 35 Roll-down

The total number of quarterly returns rolled down from Level 35 Roll-down is 128 by 64 Local Authorities, the details are summarised in Table 10

Table 10 Summary of Level 35 Roll-downs

Authority Type	Number of Level 35 Roll-downs
Unitary	27
Collection	80
Disposal	21

5.1.4 Response Times

The targets for validation responses are:

- 1st Validation Response within 5 working days of the return reaching Level 30; and
- Roll-up to Level 35 within one month of original submission to Level 30.

Table 11 provides the summary of validation timescales for 2006/07 covering the complete set of validated returns.

Table 11 Validation Timescales

	Q1	Q2	Q3	Q4
Average Number of Working Days from Original Submission to 1 st Validation Response	19.51	4.5	3.05	4.52
Percentage 1 st response within 5 days	21%	77%	90%	75%
Average Number of Working Days from Original Submission, L30, to Level 35	46.52	25.92	27.71	24.3
Percentage L30 – L35 in 30 days of submission	34%	70%	68%	74%

The figures show that, since Quarter 1, on average these targets have been achieved. The poor performance in quarter 1 was due to three key factors: the time in quarter one spent still working on late returns from the previous year, the poor quality of previous year and quarter one returns and insufficient efficiency within the validation team.

For quarter 2 we had introduced more efficiency with a new validation leader. This brought into play a much improved allocation system; we also reviewed the systems we used in house. We had improved our efficiency and the quality of returns by bringing on line summary reports the LA could use to check data. The quality and timeliness of returns also improved as the LA staff were more familiar with the use of WasteDataFlow.

The actual time spent on each LA return varies dramatically, and some returns did require a very long-time to bring to L35. However in the case of the exceptionally long periods it was normally due to waste or WasteDataFlow definitions issue that were being queried by the LA, Defra or EA. This resulted in back allocations having

to be made and so the return stayed open for a long time. This is also mainly the reason why not all of the returns for the latter quarters met the targets.

The details for each local authority by quarter can be found in the appendix spreadsheet named "validation response rates-final.xls". This includes an explanation comment for all the ones well outside the targets.

Figures 6a & 6b shows the reporting profiles of when returns reached Level 35 for both 2005/06 and 2006/07. As with the Level 30 data there is a significant improvement in the timeliness of returns reaching Level 35 by the deadline of one month after quarter end.

By the Quarter 4 validation deadline (31st July 2007) all but seven returns had reached Level 35. The final return reached Level 35 on the 6th August 2007, over a month early than in 2005/06.

Figures 7 & 8 show the reporting profiles of when returns reached Level 35 for both 2005/06 and 2006/07. As with the Level 30 data there is a significant improvement in the timeliness of returns reaching Level 35 by the deadline of one month after quarter end.

Figure 7 Profile of Returns Reaching Level 35 – 2005/06

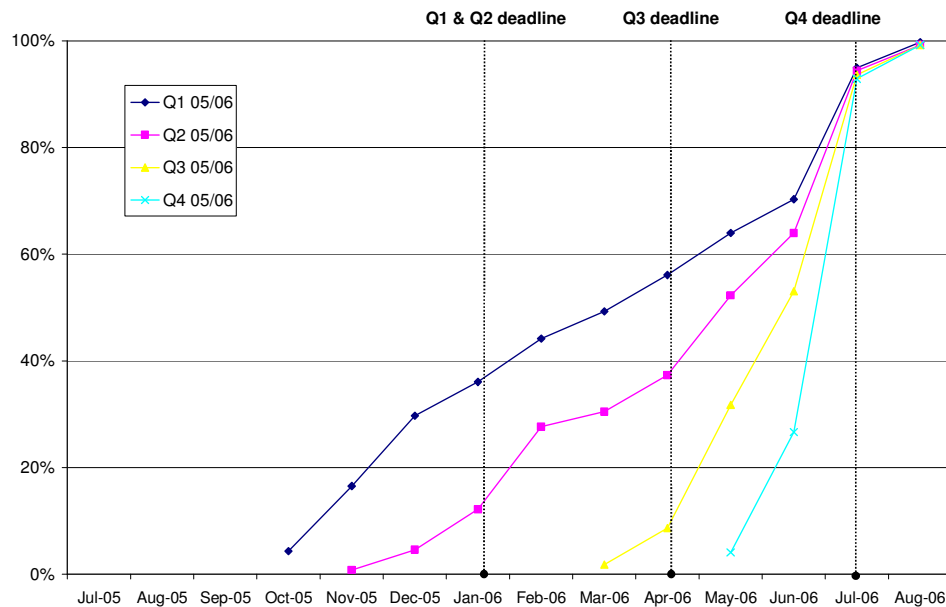




Figure 8 Profile of Returns Reaching Level 35 – 2006/07



5.2 Procedures (including options for improving efficiency)

Over the last six months the validation process has been working efficiently (the change of validation management has made a significant impact). In terms of the overall procedures themselves, these are subject to on-going review and improvement so at this time no significant changes are considered necessary.

However, the process of Level 35 roll-down requests and management need to be reviewed and agreed before the end of Quarter 1 2007/08 and this has implications on validation timescales.

In addition a new procedure has been developed for the management of EA information requirements and requests, as these requirements and requests are having an impact on validation budgets and QA time. The procedure in place now is that any request which it is thought will require more time than a standard helpdesk call will be referred to Defra for approval.

In terms of options for improving efficiency, the main option would be to move some of the validation checks closer to the user, i.e. within the WasteDataFlow system itself. Incorporating certain validation checks into the system and requiring the user to resolve the issues prior to data roll-up could improve the efficiency of the process.

5.3 Validation checks and tolerances

The current validation checks and the current tolerances appear to identify the majority of mistakes and error that could be highlighted through the process. However if there are specific checks that could improve data quality and that are realistic for validators to spot, they should be incorporated in to the process.

As highlighted above it may be more effective to move the validation checks "closer" to the users.

5.4 Annual Questions

The annual validation process was omitted from the original contract, but two of the questions were critical for the BVPIs. BVPI 86 and BVPI 87 used financial data collected in questions 31 and 32.

It was agreed that a bulk validation of all returns would be carried out based on a statistical sample, but only for that data used in the BVPIs, so only questions 31 and 32. Chase emails were also issued for missing returns.

There were two criteria for final checks for BVPI 86: first, Local Authorities whose BVPI figure was outside of £34 to £64; second, Local Authorities whose BVPI86 has changed by a rate outside the range -3% to 41%. For BVPI 87 the bands were £33 to £58 and -6% to 27%. These criteria were arrived at by analysing the figures for the headline BVPI changes between 2004/5 and 2005/6 and the absolute figures in 2005/6. The criteria were the figures that gave the 10% and 90% outliers.

Local Authorities outside either of these bands were asked to verify their figures.

Within a few days of the deadline there were only 11 local authorities whose returns were outside the validation band and not verified. However some made separate arrangements to submit BVPI 86/87 directly to the audit commission.



5.5 Annual Questions 2007/8

Going forward we would see next year having an earlier prompt that the annual data is required. This would start with email and newsletter reminders at the start of Q4. With these would be very clear guidance on the way the data is to be gathered and how it sits with the RO5 numbers.

Before then we need to agree with Defra which parts of the annual questions will be validated for 2007/8, as for 2006/7 it was only the final cost figure of the two finance questions. If this is to continue it may be sensible to add this task to the quarterly validation. Equally if it is only these numbers then it may be sensible to get the figures from the RO5 forms themselves. The RO5 forms have a deadline only 15 days after the WDF deadline. This will make the data more accurate as currently the Waste teams filling in the finance questions often generate a different number than the finance teams who fill in the RO5. Depending on time scales it would be worth investigating if this RO5 data can be transferred from within the Government domain, rather than asking the Local Authority to submit it twice.

If a fuller check of all annual data is to be done then a separate process is preferred. The RO5 discussion above would still apply, but for the other questions we would still see the best process to be one dedicated individual.

6. COMMUNICATIONS

6.1 Overall Project coordination and communication

The WasteDataFlow contract for Enviro is a UK management and helpdesk contract but an England validation and training contract. This has meant that Wales, Northern Ireland and Scotland have been doing their own validation, Local Authority training and communication.

This has been a good set-up in terms of the dealing with the differences in policy and definition across the different National authorities. The local delivery of training and validation for Wales, Northern Ireland and Scotland authorities should also make it better received.

There have been issues of communication and prioritisation with the Devolved authorities in three key areas:

- the delivery of new reports
- the communications of new developments
- the communication of the impacts of new developments on off-line tools

We have reviewed and revised the processes in place. The direct communication between the developer and the National Authorities during the second half of the year meant that reports were delivered in the new system far more promptly than previously.

For new developments we have improved the communication of the launch of the developments to ensure that all Local Authorities and National Authorities are aware of the launch.

However early in the year we still had problems effectively communicating the impact of the changes on question structure to Wales, Northern Ireland and Scotland National Authorities. This did result in some of the off-line validation tools requiring work, that was only identified when the tools failed.

For the later developments we reviewed the whole development and communication process and ensured there was a step that would review the impacts and put in place measures to eliminate or minimise them. The most recent release of new code did go more smoothly but did, through unexpected circumstances, cause a problem with the off-line tools.

We worked closely with SEPA to ensure the learning we had in fixing the problem was passed to them. Out of this came a review of the testing process to ensure a wider set of test data be used in the future.

6.2 Communications plan

The communications plan to support the on-going management and operation of WasteDataFlow was developed during Quarter 1 2006/07. The aims of the plan were:

- Promote use of the WasteDataFlow system and disseminate developments to ensure the system has a positive reputation as a successful and effective data collection and dissemination vehicle; and

- Engage with key stakeholders to ensure the purpose, operation and benefits of WasteDataFlow are understood and instil confidence in the quality of the timely and accurate data.

The communications plan included a range of method spread across they year designed to achieve these aims.

6.3 Delivery of communications plan

The delivery of the communications plan is a clear area for improvement. During 2006/7 some of the communication plan items were not operate well, whilst others were fine. Table 12 below shows the planned communication methods against the planned messages.

Each combination has been ranked either 1 for met objectives well, 2 adequately, 3 poorly. The scoring is based on how well the message was transmitted, reached its audience and maximised the audience.

Table 12 Summary of Communications Methods against Key Messages

Communications Methods	Key Messages									
	System performance	Status of returns	Development needs/ System improvements	Technical queries	Performance against Budget	Purpose of WDF	System access/operation	Reporting requirements and timescales	Data quality issues	Performance data
Project Management Meetings	1	1	1	1	1					
Operational Group Meetings	1	1	1	1					1	1
User Group Meetings (England)	2	2	1	3					3	3
Guidance Manual				2		2	2	2		
Online Help				2			2		2	
Fact Sheets				2					2	
Online News Section			3	3		3	3	3	3	
Helpdesk (telephone/e-mail)			1	1		1	1	1	1	
Half day Training Sessions			2	2		2	2	2	2	
One-to-One Training			1	1		1	1	1	1	
System Broadcast E-mails			2	3		3	1	1	2	
Quarterly Newsletter			3	3		1	2	1	3	
System Online Reports									2	2
Press Releases										

Project Management Meetings: Not directly involved in, but seems to meet purpose

Operational Group Meetings: The operational group is a good forum for gathering the views of the national authorities and other agencies

User Group Meetings (England): The user group for England could do more to realise the full potential of representing the views of the Local Authorities en mass.

For this year it is proposed to more directly support the communication between Local Authorities and User Group representatives.

Guidance Manual: The guidance manual was issued as hard-copy originally, but is now an on-line resource. It is kept up-to-date and does form a useful source of support to users. However the users are not always aware it is there, and don't seem to find it easy to access.

For this year it may be possible to link the guidance PDFs to a menu within the WDF system.. That way LAs can pull up the information more easily

Online Help: The on-line help within WDF is okay and does a job. The proposals for the guidance manual changes would be an easy way to improve this.

Fact Sheets: We have delivered fact-sheets, but when emailing them as attachments there have been spam problems. When pointing to them on the Web-site the LAs sometimes find them hard to locate. Therefore though adequate, there is room for improvement.

The integration of these fact sheets to a WDF menu item, as with the main guidance, would make the process more smooth.

Online News Section: This is in effect a static web-page that gets updated every few months. It is not really dynamic enough to grab attention and has not been a great tool for delivering information. Attempts to prioritise improvements to this part of the web-page were given a low priority by the user group.

Helpdesk (telephone/e-mail): The helpdesk service gets praise and criticism from the LAs and is discussed in more length in its own section of this report.

Half day Training Sessions: The training courses have gone well. They are discussed in more length in its own section of this report.

One-to-One Training: There has only been limited one-to-one training through the year, but when done, it is effective.

System Broadcast E-mails: The use of system broadcast emails has improved through the year from manual use of massive BCC lists to Microsoft Word based email mail-merge. We have also added data movement emails.

Quarterly Newsletter: The newsletter was revamped during the year and is well received. However as a quarterly periodical it can not really have a dynamic impact. It was originally intended for a communication tool with the broader WDF community, including those people who had registered for external reporting. However sending the newsletter to this wider group had to stop after a spam related incident resulted in the servers being blacklisted.

System Online Reports: The system online reports have undergone a revolution. During the bulk of the year the crystal reports were merely adequate. However



through the latter part of the year and into next, the introduction of the Microsoft Excel based reports has made the data much more accessible.

Press Releases: There were press releases by Defra and the Environment Agency on release of National Statistics and the LATS report, but there have been none specifically on WDF.

7. SYSTEM MAINTENANCE & DEVELOPMENT

The overall system maintenance and development items were delivered, but they were delivered generally much later than planned.

The quality of the final delivered software tool was good, but there were opportunities for improvement in the management process.

The software development is sub-contracted from Enviros to Broadskill. The plan through the year was to order and deliver parcels of work with a project managed by a mixture of Enviros and Broadskill.

Ultimately the packaging of orders with work affected the flow of the work and complicated the movement of the development resource between tasks. Also the mixture of project management from Defra to Enviros to Broadskill to the Developer was time consuming and prone to the loss of information or detail.

The quality of the delivered code was good though, as were the ideas and designs for the improvements.

Going forward into next year it has been decided to release a larger order to the developer. This will free up the developer when working on multiple tasks and give him a longer term vision of work flow. The individual items of work though will still be packaged with estimates and delivery dates

The plan is also to forward load the main development items, so that the user community can gain benefit from them as soon as possible.

Table 13 Summary of Development Items

Item	Sept 07	Oct 07	Nov 07	Dec07	2008
Autoupload of data for 'fixed length' questions.	Specification	Design work	Review and feedback	Launch	[The variable length questions.]
Validation improvements	Spec		Deliver		
Reports	Phase 2 england spec	Phase 3 england spec	Deliver phase 2 Scotland reports?	Deliver phase 3 Scotland reports?	Scotland reports when requirements available
Selection list update	Gather information		Deliver		
Bug-fix and maintenance	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing

Going into the 2007/8 year we have also minimised the project management overhead. We are now running a process whereby the line is Defra/Customer – Enviros – Developer. But also that when best for efficiency that the Developer can liaise directly with the Customer. This is intended to provide a fluid, flexible and more reliable management process.



7.1 Overall system performance

The system is hosted by a company called Areti, through a contract directly with Defra. The level of service was high. There was virtually no server downtime due to infrastructure issues.

There were occasions (around 10) during the year when system overload was met either through simple bulk of users or by errors occurring in the software. Generally these outages were highlighted and corrected within a few minutes.

At this stage the general operation of WasteDataFlow does not seem to require changes to the hardware. However it would be worth reviewing the available hardware for:

- Disaster recovery
- Testing and development

Currently the disaster recover process would involve the recovery of backups and the restoration of the system to a point 'yesterday' at best. The introduction of a single server to hold a live copy of the web-site and database would allow a recovery point closer to 'now'. This option would require cost for a server and a licence of MSSQL Server 2000.

For development and testing we use a second copy of the system located on the same hardware. Ideally there would actually be a full testing environment with its own servers. This way any bugs or issues with newly developed code would have no ability to affect the performance of the main system.

7.2 2006/07 Development – what, why and impact

The key developments during 2006/7 were

C-variables: A system to precalculate regularly used summary data for use in reports.

The WasteDataFlow system asks the Local Authority to complete many questions, often the analysis that is then required (such as PI figures) uses a function of answers from different questions. A C-variable is just such a function, and the values are calculated and stored when a quarterly return is rolled up.

This then means that reports need only aggregate c-variables rather than always having to contain the full function logic. This makes making reports and using WasteDataFlow data more easy.

Work on New Reports Engine: The ability to get c-variable data out into spreadsheets

To make best use of the c-variables and make future reports easy to create and manage, the groundwork was put in that would allow WasteDataFlow data to be associated with spreadsheets. This would be used for the PI and Summary reports, and for the major reports work that was delivered at the beginning of the 2007/8 year.

PI Reports: Excel based reports showing a Local Authorities PIs for a given quarter



The PIs for England, Wales and Northern Ireland were brought together onto a detailed spreadsheet based report. The data is c-variables based, many of which were created to enable the PIs.

Online Summary report: A report mirroring the validation report used by the Enviros team.

This spreadsheet based report was brought in early in the year, prior to the c-variables. It therefore contains quite a lot of complex functions based around csv downloads. It is immensely useful to the Local Authorities that use it. For 2007/8 it is likely to be revamped to use the c-variables.

User default question selection: The ability for a Local Authority to opt out of certain questions.

It became clear from user feedback that many of the Local Authorities did not use all the questions, especially the disposal questions, as the appropriate facility was not available in their area. We therefore provided a mechanism where the Local Authority could exclude questions.

This same screen has also been used to show the status of each question (answered, excluded etc) and as a navigation tool to move to another question.

Environment Agency reports: Reports based on waste destinations.

A series of reports were incorporated for the Environment Agency that allow the WasteDataFlow data to be reported by the destinations used by Local Authorities.

Email notifications: To enable the system to email Local Authorities as their quarterly submission moves through the WasteDataFlow system.

This functionality was requested by users, and was to enable authorisers who may not regularly log-on to WasteDataFlow to receive an email requesting they log on and approve their return. It was built to allow users to (un)subscribe to receive emails at the different levels and to allow Local Authorities to (un)subscribe to sending emails at the different levels.

Mass Balance reports: Spreadsheet based reporting of the Mass Balance calculation for UAs, WDAs and WCAs.

The Mass balance report was another critical tool for the Environment Agency and for the validation and use of WasteDataFlow data. For WCAs and UAs it was easily incorporated into the Summary report as all the required data is in the Local Authorities return.

For WDAs it involved more work as data needed to be pulled from the relevant WCAs. As well as a Mass Balance for a WDA the report also gives the WDA user the ability to see in one place the status of the quarterly return for each WCA.

Review of Q51-65: Review and preliminary work on modifying the number of transfer stations for the disposal questions.

This work was to review how the questions could be modified to support more than one transfer station. This development task was subsequently completed in September 2007.

Queued Data Roll-up: Provide a system whereby the Local Authority roll-up request waits on a queue. The Local Authority then receives an email when the rollup is complete.

This work was necessary as one of the early reasons for slow performance of the system was the attempts by the system to roll up more than one return at a time. By employing a queue system the server was able to focus on one return, and so get through the workload more efficiently. Users saw a more reliable and generally quicker roll-up process.

Development items not completed in the year: were: BVPI benchmarking reports, Destination list update process, auto-upload of data, system level question management, user log-on and website review.

7.3 Development delivery

The delivery of the development was not ideal. Calendar time ran out during the year stopping further development. However the delivery was very cost effective. It was also, where possible, very responsive.

The key area for improvement would be in the timeliness of delivery and the meeting of target dates. To this end a more streamlined process for managing development has been brought in for 2007/8.

7.3.1 Development Management with England, Wales, Northern Ireland and Scotland.

As with the communication part of the project there is an interesting dynamic with Defra being responsible for the whole of WasteDataFlow and also responsible for the reporting and performance of the Local Authorities in England.

The dynamic is reflected in the fact that Enviros have the contract for the whole of WasteDataFlow (WDF) software development and helpdesk, but the validation and training for England only.

This has on occasion created a feeling that the overall development plan is driven more by England needs. This is sometimes true, especially given there are 394 local authorities in England out of the total 474.

The process for generic development suggestions is:

- feedback from the helpline (which is total coverage)
- response to legislative change
- feedback from user groups
- ideas from the Operational Group (at which Wales, Northern Ireland and Scotland user group feedback is made)

From this list of ideas is drawn up a shortlist of tasks that are then put to the National Authorities to process and prioritise. The specification for each of these tasks is likewise a document that is circulated for review by all.

Most development is then available to all parties to either use or not use as they wish. In many cases functionality is specifically included to allow Local Authorities to opt in/out and to allow different functionality based on the National authority. A good example of this would be the email notification project. We have over the



previous two years done significant work on specific questions for Wales, Northern Ireland and Scotland Local Authorities as well as reports (PI mainly).

Issues on bugs and errors in the system are handled in the same way for all, irrespective of the specific source. Generally the reporting and fixing of bugs works well. However there are occasional lapses when a bug may inadvertently remain unfixed for a while. This has been the case for a bug identified in Wales (on a c-variable) and England (on a waste destination).

The main issues have arisen around the communication of the planned changes, especially with SEPA. As discussed under the communication plan this is an area that has been addressed during the year and will continue to be improved.