

From: The Minister

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Dear Members

Further to my Oral Statement to the Assembly on Monday 10 June on the Northern Ireland Housing Executive's Maintenance Contracts, it is my intent to deposit a redacted version of the ASM report (attached) in the Assembly Library for Members and other persons interested in the information contained therein.

Yours sincerely

*Nelson McCausland*

**NELSON McCAUSLAND MLA**  
**Minister for Social Development**

## Introduction and background

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### Egan contracts

2.1 The contracts in question are known as "Egan" contracts. The procurement and letting of Egan contracts takes account of the principles of the Rethinking Construction Report produced by Sir John Egan in 1998. Under these contracts the intention is to develop a closer longer term working relationship between the awarding authority (NIHE) and the Contractors.

2.2 Egan contracts vary from the traditional measured term contracts placed by the NIHE in that:

- ◆ the contract is for the provision of a response maintenance repairs service to all properties managed by a particular District Office;
- ◆ the contract is for the provision of a response maintenance repairs service embracing building, plumbing and electrical related work including more extensive works such as a Change of Tenancy, Minor Disabled Adaptations and the installation of Door Entry Systems, i.e. it is an "all trades" contract. It however excludes all work relating to Solid Fuel Closed Room Heating, Oil Heating and Gas Heating installations;
- ◆ the contract requires the Contractor to provide an emergency cover service outside normal working hours. This includes night-time, weekends and public holiday cover; and
- ◆ there is a direct electronic link between the NIHE District Office and the Contractor's office to allow the transfer of information and to enable the major day to day administrative elements of contract management to be carried out electronically.

2.3 A central theme of Egan contracts is the "partnership" between the NIHE District Office and the Contractor.

2.4 The Contractors which were considered as part of this review held the following Egan maintenance contracts with NIHE:

Contractor	Contract issued	District
Leeway Maintain Limited	2006	Belfast 5 (Shankill)
Carillion (White Horse F M Group)	2006	Castlereagh Lisburn Antrim Street Lisburn Dairyfarm
H & A Mechanical Services	2009	Ballymena Bangor Carrickfergus Larne Newtownards
Mel Davison Construction	2006	Armagh Banbridge Lurgan/Brownlow Portadown

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<b>Contractor</b>		<b>District</b>
Omega Mechanical Services	2009	Collon Terrace Waterloo Place Waterside
PK Murphy Construction Limited	2009	Antrim

**Timing of work carried out**

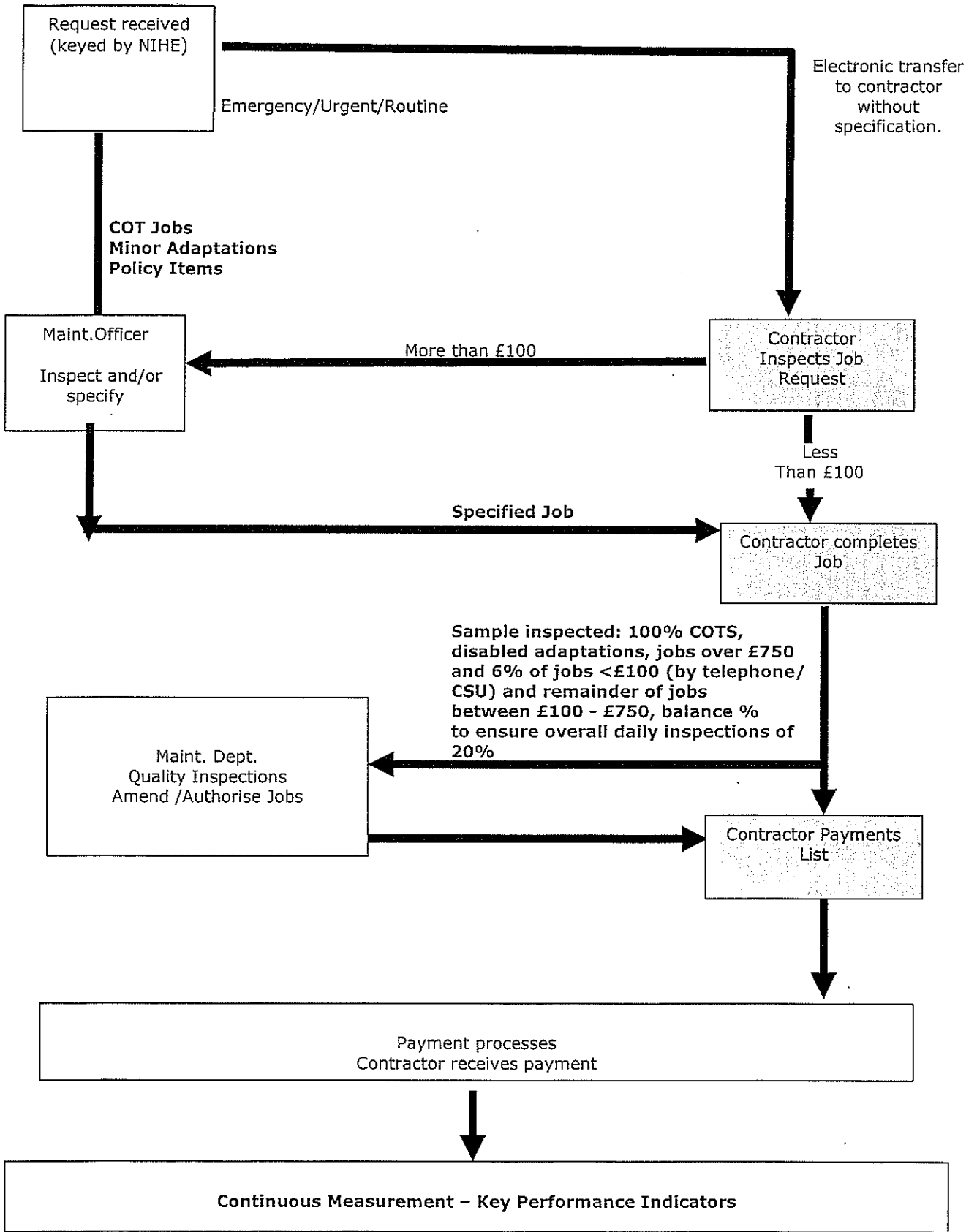
2.5 VB Evans' site inspections took place during the period October 2011 to May 2012. The desktop review was completed during the period March 2012 to June 2012. Our report is based on the findings at that time and does not take into consideration any changes in systems or alterations that may have occurred since our initial work was completed.

**Authorisation and placing of works orders**

2.6 In order to be able to fully understanding the findings set out later in this report it is important to be aware of the ordering process for repairs and other minor works and the various authorisation levels which apply in Egan contracts. A high level description of these work flows and document flows associated with this process is set out below.

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2.7 The classification of orders and the associated required response times are as follows:

Classification	Response and completion time to be within
Immediate Call Out	Immediate
Emergency	24 hours from receipt of Repair Request
Urgent	4 days from receipt of Repair Request
Fast Stream	10 days from receipt of Order
Routine	3 weeks from receipt of Order
COT (Change Of Tenancy)	As stated on the order

2.8 It can be seen from the flow chart set out on page 7 that for works orders below £100 the Contractor visits the site and repairs the defect and subsequently records the details of the work completed on the computerised job work record. Once the Contractor has been notified of a defect it does not require further authorisation for jobs below a value of £100.

2.9 Of the jobs below £100, 6% are selected at random by the Housing Executive's HMS systems for telephone "inspection" by the Customer Service Unit ("CSU"), for jobs over £750 100% of jobs are physically inspected by the Maintenance Officers ("MO") and for jobs between £100 and £750 a balancing % is selected by HMS for inspection, which ensures that there is an overall daily inspection of 20% of jobs. In addition to these "value" criteria all "policy" jobs are inspected, these include all Change of Tenancy ("COT") jobs and minor adaptations for disabled tenants.

2.10 A Schedule of Rates ("SOR") was created by the NIHE in respect of its Egan Contracts. This assigns codes, and costs, to each possible piece of work that the Contractor could be asked to complete, including an extremely detailed list of the specific work that must be completed in respect of each code including items that are Deemed to Be Included ("DTBI") within each code. The price for each SOR code is set by the NIHE and uplifted annually for inflation on the anniversary of the commencement of the contract. Under Egan contracts the use of codes other than SOR codes is to be avoided.

### Structure of our report

2.11 We have been instructed to prepare our report on the basis that the work carried out on, and the findings and recommendations in relation to each of the Contractors is contained in a separate "stand alone" section. As such there is an element of repetition in Sections III to VIII, which deal with each individual Contractor.

**Overall recommendations****X**

10.1 We recommend that NIHE address the following areas.

**Inspections**

10.2 The anomalies identified by VB Evans' testing, which had been passed by the NIHE's own MOs, should be discussed with the MOs responsible for passing the unsatisfactory work.

10.3 Additional training or updates is required for MOs in respect of:

- ◆ measurement;
- ◆ recording of inspections results; and
- ◆ the course of action to be taken if the inspector is unable to gain access to a property to inspect or if the work continually fails inspection.

10.4 Certain MOs need to be reminded of the need to properly inspect and if necessary re-inspect jobs before passing them for payment.

10.5 The Area Managers should regularly review the number and percentage of "not complete" and "no access" inspections of the MOs within their areas and make appropriate enquiries / investigations if unusual trends are found.

10.6 It is unclear from the work we have carried out why jobs are being passed by inspectors when they should not be passed. This needs to be investigated with the District Offices.

10.7 Jobs with values of, more than £750 should not be passed without a site inspection regardless of access issues. If there is difficulty obtaining access, and it is felt that it is unfair on the Contractor to continue to withhold payment, then payment should be made but subject to a refund in respect of any unsatisfactory work identified once an inspection has been completed.

10.8 Based on VB Evans site inspections it is recommended that the NIHE, either through RIU or an independent 3<sup>rd</sup> party, carry out further site inspections in the following districts and areas:

- Leeway – jobs which include roofing SORs;
- H & A – Carrickfergus, all job types; and
- MDC – Lurgan, all job types.

**Overall recommendations**

X

**Fire doors**

10.9 VB Evans recommends that fire doors should only be specified when required and, if required fitted to specification. VB Evans found that fire doors are being specified and fitted when not required. In addition it was found that fire doors were not being fitted as per specification. Under the 2009 contracts the specification required that fire doors be fitted with rising butt hinges however it was found that they were frequently being fitted with ordinary hinges and door closers. Over-claims were identified in respect of door closers.

**Smoke alarms**

10.10 VB Evans found that there were cases where a claim had been made and paid for replacing the entire smoke alarm but on inspection the mounting patress had not been replaced. VB Evans recommended that this is only paid for if actually replaced.

**NICEIC labels**

10.11 We understand that it is recommended good practice under Guidance Note 3 of the IET Regulations that labels recording the date of the inspection be applied after any new electrical work and that this covers inspections and re-inspections and also any new switch gear (for example re-wiring a kitchen). It was found that labels were not often applied. VB Evans recommends that NICEIC labels are applied after each new electrical works, inspection and re-inspection.

**Seals on electric meters**

10.12 During the site inspections it was found that on the larger jobs (mainly the COTs) the seals were frequently missing from the electric meter. We understand that it is a criminal offence to tamper with electric meters and that this could also lead to health and safety issues. One reason why seals would be removed would be to "hot wire" the meters. VB Evans recommends that on COT pre inspections the seals on the electric meters be checked to ensure that they are intact and that they are also checked during the inspection after the work is completed.

**D handles**

10.13 V B Evans found there were cases where a claim had been made and paid for 300mm D handles (as specified by NIHE) however 100mm D handles had actually been fitted. VB Evans recommends that the Contractor be made aware of this error and that the handles are fitted as specified.

**Overall recommendations****X****Forward planning between NIHE departments**

10.14 VB Evans identified a number of instances where remedial work was carried out and then this work was effectively re-done under a planned works scheme. For example, kitchens would be replaced, or be substantially repaired, and then the kitchen would be again replaced. This also happened, but less frequently, with window replacements.

10.15 This form of waste needs to be curtailed. The various departments within NIHE need to examine a sample of instances where this arose with a view to identify what steps require to be taken to eliminate this loss.

**Variation in Contractor uplift**

10.16 The variation arising on the specific Omega works orders identified within our report needs to be brought to the attention of the NIHE and urgent enquiries carried out to see how this problem has arisen, if it has been rectified, how widespread it was and if the price paid on any wrongly priced works orders has now been corrected.

**Duplicate works orders**

10.17 From the site inspections and review of duplicate SORs it was identified that there were multiple works orders being issued for the same job, particular for COTs. It was also identified that items specified on a works order would not be completed by the Contractor on that particular order but would then form part of another works order. This creates a situation where it is more difficult to monitor and inspect work and has led to duplication of payment. It is unclear why multiple works orders are being issued for the same job. Given that on larger jobs and on COTs there is a pre inspection of the work required, it is recommended that as far as is practical only one works order is issued per job. It is recognised however that there are occasions where the requirement for additional work will only become apparent once a job has commenced, however, the additional works orders should be minimal.

**Accurate description of works carried out on the works order**

10.18 There were examples both from the site inspections and the duplicate SORs where the description on the works order was significantly different to the work actually carried out.

10.19 It is unclear if this discrepancy arises from genuine errors or an attempt to mislead. Controls should be put in place to ensure that the description on the works order matches the work that was actually required and carried out.

**Key performance indicators ("KPIs")**

10.20 New KPIs were introduced in April 2011. Any KPI below 75% was recorded as a fail. The KPIs should be closely monitored with poor performance being challenged by the NIHE.



**Overall recommendations**

X

10.21 When Egan contracts are being renewed, consideration must be given (in consultation with the NIHE's legal department) to incorporating KPIs within the contract together with terms which enable the revision and amendment of KPIs, if necessary, during the term of the contract. The NIHE should closely monitor the data it produces in respect of KPIs and the targets set, challenge poor performance and if necessary, and under the terms of any new contract, terminate the contract of consistent poor performers.

10.22 We understand that new revised KPIs are due to be implemented when the new contracts commence.

**Monitoring ongoing performance**

10.23 We have, through our desktop review, identified a suite of reports which could, if collated and reviewed regularly, provide NIHE management with useful information in relation to the performance of both its Contractors and its MOs. If this has not already occurred, we recommend that the NIHE establish a performance measurement function, either under the auspices of the RIU or Internal Audit but independent of Housing and Regeneration, whose role should be to proactively "mine" the data held on the NIHE's systems to identify trends, or outliers, which could direct specific further investigations into poorly performing Contractors or MOs.

**Previous report on review of NIHE Contractor**

10.24 We note that most of the recommendations (with the exception of the specific recommendations with regard to certain items, e.g. fire doors, smoke alarms etc) were also made in our previous report dated October 2010. It is unclear what steps the NIHE has taken to implement the recommendations set out in that report.

## Summary of findings for all contractors

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### Scope of our investigation

9.1 The scope of this review, as set out in our terms of reference, was to:

- i) review the quality of the workmanship undertaken;
- ii) consider whether the invoices submitted by the Contractors, and paid by the Housing Executive, were appropriate within the context of the work requested and the work actually carried out;
- iii) consider whether the inspection regime in place within the Housing Executive operated as expected;
- iv) consider whether the key controls in place to manage contracts, to ensure that the quality of works undertaken was monitored and price variations were identified, valued and approved, were adequate and operated effectively;
- v) classify any anomalies identified during 1<sup>st</sup> round and 2<sup>nd</sup> round inspections; and
- vi) extrapolate any findings to determine the possible level of any overcharging / errors.

9.2 The work required to address the terms of reference was carried out by means of:

- i) site inspections by VB Evans on jobs completed by the Contractors; and
- ii) a desktop review and analysis of information held on NIHE's computer systems.

### Period of review and Contractors reviewed

9.3 The review was to cover work completed by the Contractors in the 9 month period from 1 September 2010 to 31 May 2011.

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9.4 The Contractors and districts which were considered as part of this review were:

Contractor	Contract issued	District Contract
Leeway Maintain Limited ("Leeway")	2006	Belfast 5 (Shankill)
Carillion (White Horse F M Group) ("Carillion")	2006	Castlereagh Lisburn Antrim Street Lisburn Dairyfarm
H & A Mechanical Services ("H & A")	2009	Ballymena Bangor Carrickfergus Larne Newtownards
Mel Davison Construction ("MDC")	2006	Armagh Banbridge Lurgan/Brownlow Portadown
Omega Mechanical Services ("Omega")	2009	Collon Terrace Waterloo Place Waterside
PK Murphy Construction Limited ("PK Murphy")	2009	Antrim

### Timing of work carried out

9.5 VB Evans' site inspections took place during the period October 2011 to May 2012. The desktop review was completed during the period March 2012 to June 2012. Our report is based on the findings at that time and does not take into consideration any changes in systems or alterations that may have occurred since our initial work was completed.

### Work undertaken

#### Site inspections

9.6 In order to determine the quality of the workmanship, physical site inspections were carried out on jobs. 640 random site inspections were carried out during the 1<sup>st</sup> round of inspections. Based on the 1<sup>st</sup> round findings, a further 423 site inspections were completed during the 2<sup>nd</sup> round of inspections.

9.7 Given the nature of the NIHE's inspection process for its works orders, as described in paragraph 2.6, we stratified the population for the 1<sup>st</sup> round of inspections into the following three strata:

- ◆ jobs with values less than £100;
- ◆ jobs with values between £100 and £750; and
- ◆ jobs with values over £750.

9.8 This allowed the weighting of the sample towards higher value items.

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9.9 The 2<sup>nd</sup> round of inspections was focused on particular areas which were identified as being of concern during the 1<sup>st</sup> round inspections.

### Desktop review

9.10 We completed a desktop review of the information obtained from the NIHE's computer systems seeking to identify any areas of concern that may indicate overpayment by the NIHE and/or inadequate inspections by District Office staff. The following reports were obtained (via the NIHE's IT department) and reviewed:

- i) details of the NIHE "housing stock" in each district in Northern Ireland at 31 May 2011;
- ii) value and number of All Trades ("AT") jobs completed, per month, for each district in Northern Ireland;
- iii) details of the jobs completed outside of the target response time, for each district in Northern Ireland;
- iv) the results of inspections carried out by each Maintenance Officer, for each district in Northern Ireland;
- v) details of duplicate SOR codes at the same property within a 6 month period;
- vi) second time call out analysis, per month, split by category (recall and poor workmanship) for each district in Northern Ireland; and
- vii) KPIs in April 2011 and May 2011 (i.e. the period since the NIHE's index of KPIs was amended).

9.11 For each of the reports listed above, we analysed and reviewed the data with particular emphasis on the performance of the Contractors as compared to the other districts in Northern Ireland in order to identify any unusual trends or statistics.

### Summary of results

9.12 The details of the work carried out and detailed findings and recommendations are set out for each Contractor within Sections III to VIII. We have summarised the overall findings below.

### Quality of workmanship

9.13 In order to determine the quality of workmanship generally for each Contractor, and to establish if areas of concern existed, 640 1<sup>st</sup> round inspections were carried out. The works orders which were to be inspected were randomly selected for each Contractor and covered all districts.

## Summary of findings for all contractors

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9.14 Our findings have been summarised under the following headings:

Heading	Meaning
Total inspected - number	The total number of jobs inspected
Total inspected - value of jobs	The total value of the jobs inspected
Total anomalies - value of jobs (£)	The total value in £s of all jobs where a financial anomaly was identified
Total anomalies - value of jobs (% of value inspected)	The total value of all jobs where a financial anomaly was identified as a % of all jobs inspected
Total anomalies - number of anomalies (actual)	The number of jobs inspected where financial anomalies were identified, e.g. the workmanship was not up to standard, items were not completed as per specification, items were claimed which were not identifiable on inspection
Total anomalies - number of anomalies (% of number inspected)	The number of jobs where anomalies were identified as a % of the number of jobs inspected
Total anomalies - value of anomalies (actual) (£)	The actual value of the SOR code in £s (the value of the individual works item) on which the financial anomaly was identified, or the value of the deemed adjustment
Total anomalies - value of anomalies (% value of jobs)	The value of all the financial anomalies in comparison to the total value of jobs where a financial anomaly was identified

9.15 Where financial anomalies were identified during inspections VB Evans classified these into five categories:

- Category A:** Clear cut. Contractor should not have been paid for non-conforming, defective or omitted works or should have been paid for works that they have omitted to claim i.e. unclaimed works.
- Category B:** Grey area. Evidence not conclusive or it may be unreasonable to deduct the full amount for the anomaly identified.
- Category C:** NICEIC test claimed but no evidence to confirm that test has been carried out.
- Category D:** Works where the item installed is incomplete but is fit for purpose and acceptable. In this instance, a Category A deduction would be made for the incomplete element of the work and the remainder of the sum, which is deemed fit for payment, is in Category D.
- Category E:** Works where tenant has given credible comment to convince VB Evans that there is a question mark over the work recorded as being carried out by the Contractor. However, there is no supporting evidence for the anomaly other than the tenant's representations.

9.16 We have summarised in the tables below the results of the site inspections for the 1st round:

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	Total inspected		Total anomalies				Clear cut – Cat A			
	No.	Value of jobs	Value of jobs		No. of anomalies		Value of anomalies			
		£	£	% of value of inspected	Actual	% of no. inspected	Actual	% of value of inspected		
						£		Value	% of total inspected	
Leeway Belfast 5										
Carillion Castlereagh Lisburn Antrim St Lisburn Dairyfarm										
H & A Ballymena Bangor Carrickfergus Larne Newtownards										
MDC Armagh Banbridge Portadown Lurgan										
Omega Collon Terrace Waterloo Place Waterside										
PK Murphy Antrim										
<b>Total</b>	<b>640</b>	<b>545,067</b>	<b>402,571</b>	<b>73.86%</b>	<b>273</b>	<b>42.66%</b>	<b>46,954</b>	<b>8.61%</b>	<b>31,487</b>	<b>5.78%</b>

9.17 Overall, VB Evans inspected 640 jobs in round 1 with a value of £545,067. 273 (42.66%) of these jobs had anomalies. The assessed value of these anomalies was £46,954, which represents 8.61% by value of all of the work inspected. £31,487 (5.78%) of these anomalies were "clear cut" (Category A).

9.18 The analysis in the table above identifies a degree of inconsistency between contractors but the more significant degree of inconsistency arises between district offices.

9.19 The 2<sup>nd</sup> round of inspections was focused on particular areas which were identified as being of concern during the 1<sup>st</sup> round inspections. The results of 1<sup>st</sup> round inspections showed that in some districts the level of anomalies were at a lower level than other districts, these districts were therefore not subject to 2<sup>nd</sup> round inspections.

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9.20 The Contractors and districts selected for 2<sup>nd</sup> round inspections were:

Contractor	Types of jobs	District Contract
Leeway Maintain Limited	COTs and roofing	Belfast 5 (Shankill)
Carillion (White Horse F M Group)	COTs and roofing	Castlereagh
H & A Mechanical Services	COT COT	Carrickfergus Newtownards
Mel; Davison Construction	COT COT	Lurgan/Brownlow Portadown
Omega Mechanical Services	COT	Collon Terrace
PK Murphy Construction Limited	COT	Antrim
<i>Change of Tenancy ("COT")</i>		

9.21 We have summarised in the table below the results of the focused 2<sup>nd</sup> round site inspections:

	Total inspected		Total anomalies					Clear cut – Cat A		
	No.	Value of jobs £	Value of jobs		No. of anomalies		Value of anomalies		Value £	% of total inspected
			£	% of value of inspected	Actual	% of no. inspected	Actual £	% of value of inspected		
<b>Leeway</b>										
Belfast 5 - COT										
Belfast 5 - Roof										
<b>Carillion</b>										
Castlereagh - COT										
Castlereagh - Roof										
<b>H &amp; A</b>										
Carrickfergus - COT										
Newtownards - COT										
<b>MDC</b>										
Lurgan - COT										
Portadown - COT										
<b>Omega</b>										
Collon Terrace - COT										
<b>PK Murphy</b>										
Antrim - COT										
<b>Total</b>	<b>423</b>	<b>642,414</b>	<b>587,036</b>	<b>91.38%</b>	<b>325</b>	<b>76.83%</b>	<b>50,231</b>	<b>7.82%</b>	<b>33,055</b>	<b>5.15%</b>

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9.22 Overall, VB Evans inspected 423 jobs in the 2<sup>nd</sup> round inspections, with a value of £642,414. 325 (76.83%) of these jobs had anomalies. The assessed value of these anomalies was £50,231, which represents 7.82% by value of all of the work inspected. £33,055 (5.15%) of these anomalies were "clear cut."

9.23 We have summarised in the tables below the results of the 1<sup>st</sup> and 2<sup>nd</sup> round site inspections:

	Total inspected		Total anomalies				Clear cut – Cat A			
	No.	Value of jobs	Value of jobs		No. of anomalies		Value of anomalies			
		£	£	% of value of inspected	Actual	% of no. inspected	Actual	% of value of inspected		
Leeway Belfast 5										
Carillion Castlereagh Lisburn Antrim St Lisburn Dairyfarm										
H & A Ballymena Bangor Carrickfergus Larne Newtownards										
MDC Armagh Banbridge Portadown Lurgan										
Mega Collon Terrace Waterloo Place Waterside										
PK Murphy Antrim										
<b>Total</b>	<b>1,063</b>	<b>1,187,481</b>	<b>989,606</b>	<b>83.34%</b>	<b>598</b>	<b>56.26%</b>	<b>97,186</b>	<b>8.18%</b>	<b>64,542</b>	<b>5.44%</b>

9.24 Overall, VB Evans inspected 1,063 jobs during the 1<sup>st</sup> and 2<sup>nd</sup> round inspections with a value of £1,187,481. 598 jobs (56.26%) of these jobs had anomalies. The assessed value of these anomalies was £97,186 which represents 8.18% by value of all the work inspected, £64,542 (5.44%) of these anomalies were Category A, clear cut anomalies.



**Summary of findings for all contractors****IX**

9.25 The NIHE's Repairs Inspection Unit ("RIU") is an internal inspection unit which carries out inspections of various districts. Prior to April 2011 (i.e. for the majority of the period under review) the NIHE, through RIU, viewed any inspection where there were 10% or more (by number of inspections) works orders in which there were errors as being non-compliant. In the previous tables (paragraphs 9.16, 9.21 and 9.23) we have included an assessment of the actual error rate against RIU's internal criteria. The actual error rate is shown in the column in described by "Total anomalies - number of anomalies (actual) - % of no. inspected" column in the previous tables. This information has been included to demonstrate the compliance or non-compliance of the works orders inspected by reference to the NIHE's own measurement. It can be seen from the above table(s) that all districts were, based on the RIU's categorisation, non-compliant. This analysis identifies that inspections within all the districts tested were assessed as non-compliant using the RIU measure.

9.26 When reviewing the table at paragraph 9.23 it should be remembered that the results for some districts are skewed by the fact that they incorporate round 2 inspections which were focused on perceived areas of concern.

9.27 The site inspections identified that for all districts there was work that was being paid, for which work was not being completed to an acceptable standard and work which had not been completed at all (Category A anomalies).

9.28 We have summarised below the districts where the number of jobs in which errors were identified were in excess of 50% (taken from the table at paragraph 9.23):

**Leeway**  
Belfast 5

**Carillion**  
Castlereagh

**H & A**  
Carrickfergus  
Newtownards

**MDC**  
Lurgan  
Portadown

**Omega**  
Collon Terrace

**PK Murphy**  
Antrim

9.29 We are not aware of any statistics held by NIHE in respect of the N Ireland "average" for non-compliant inspections carried out by the RIU. It is therefore not possible to assess the "performance" of the districts reviewed in terms of the quality of workmanship and appropriateness of invoices issued, with regard to the "average" performance of NIHE Contractors.

## Summary of findings for all contractors

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## Overdue jobs

9.30 We have been provided with details of the number of overdue jobs for all districts in N Ireland. We have also been provided with the "housing stock" in each district. In our opinion it is reasonable to assume that the larger a district the higher number of overdue jobs there will be in that district. In order to consider the performance of the districts in respect of meeting completion targets, we took into consideration the relative size of the district in comparison to the N Ireland average. We then considered the performance of each district against the N Ireland average. As such 100% is equivalent to the weighted N Ireland average, with less than 100% being below average and above 100% being above average. Districts with poorer than average performance (ie those with percentages above 100), have been highlighted in the table below:

	<b>&lt;7 days overdue</b>		<b>7 days - 14 days overdue</b>		<b>&gt;14 days overdue</b>	
	<b>% of N.I average</b>	<b>% of N.I average</b>	<b>% of N.I average</b>	<b>% of N.I average</b>	<b>% of N.I average</b>	<b>% of N.I average</b>
	<b>No.</b>	<b>£</b>	<b>No.</b>	<b>£</b>	<b>No.</b>	<b>£</b>
<b>Leeway</b>						
Belfast 5	71%	<b>172%</b>	97%	<b>336%</b>	<b>178%</b>	<b>639%</b>
<b>Carillion</b>						
Castlereagh	92%	58%	91%	96%	<b>198%</b>	97%
Lisburn Antrim St	78%	68%	94%	<b>103%</b>	83%	58%
Lisburn Dairyfarm	65%	42%	36%	16%	40%	12%
<b>H &amp; A</b>						
Ballymena	<b>135%</b>	<b>115%</b>	<b>112%</b>	79%	69%	64%
Bangor	78%	49%	57%	24%	60%	32%
Carrickfergus	93%	59%	<b>139%</b>	70%	<b>169%</b>	92%
Larne	120%	69%	87%	47%	53%	20%
Newtownards	49%	39%	40%	21%	18%	10%
<b>Mei Davison</b>						
Armagh	<b>110%</b>	<b>168%</b>	77%	<b>110%</b>	34%	50%
Banbridge	<b>108%</b>	<b>113%</b>	<b>132%</b>	<b>177%</b>	49%	65%
Lurgan/Brownlow	51%	71%	62%	60%	19%	11%
Portadown	45%	95%	18%	30%	7%	9%
<b>Omega</b>						
Collon Terrace	32%	26%	31%	32%	8%	5%
Waterloo Place	37%	65%	33%	36%	9%	10%
Waterside	80%	85%	53%	52%	77%	64%
<b>PK Murphy</b>						
Antrim	32%	48%	16%	88%	19%	26%
<i>% of N.I. average, adjusted for size of district</i>						

**Summary of findings for all contractors****IX**

9.31 Based on the findings summarised in the table at paragraph 9.30 we have summarised those districts which have a level of overdue jobs higher than the N Ireland average, ie those above 100%:

Leeway – Belfast 5;

Carillion – Castlereagh;

H & A – Ballymena;

H & A – Carrickfergus;

MDC – Armagh; and

MDC – Banbridge.

9.32 Leeway's level of overdue jobs is of particular concern.

**Appropriateness of invoices submitted**

9.33 Based on VB Evans' site inspections there is evidence of overpayments, not only in terms of payment for substandard work and work not completed at all, but also work being claimed twice and work being over-measured (these are included within Category A anomalies).

**Variation in SOR uplift**

9.34 Under an Egan contract there is a set Schedule of Rates ("SOR") which sets out the SOR for each item of work. Under each contract the Contractor is paid a certain percentage (based on their contract terms) of the price quoted under the SOR (e.g. 105% of SOR). This is reviewed on an annual basis and, if deemed necessary, an uplift to the SOR is applied. As such the difference between the SOR and the Contractor rate should be constant in percentage terms. On four Omega works orders selected for review this was not the case. The percentage differential varied significantly from -99% to +993%. It is unclear why or how this arose on certain of Omega's jobs. We note that three of the jobs were ordered in August 2010 and the fourth was ordered in February 2011. This matter was identified during the 1<sup>st</sup> round inspections and was brought to the attention of the NIHE at that stage. We still await a satisfactory explanation as to how this arose.

**Summary of findings for all contractors****IX****KPIs**

9.35 As the new KPIs were only introduced in April 2011, and therefore were only available for two months of the review period, the conclusions that can be drawn from any analysis of KPIs are limited.

9.36 The KPIs are categorised by the NIHE as follows (definitions provided by NIHE):

- KPI 1            Client satisfaction with quality of service**  
Measures the number of unsatisfactory post inspections for reasons of poor quality and standard of workmanship and also measures jobs that have not been completed but not claimed for.
- KPI 2            Predictability of costs**  
Measures the number of unsatisfactory post inspections for reasons of inaccurate measurements, use of inappropriate schedule of rates codes and claims for work that has not been completed.
- KPI 3            Customer satisfaction with service from Contractor**  
Measures the level of customer satisfaction with the service provided by the Contractor during the completion of the work.
- KPI 4            Customer satisfaction with quality of work**  
Measures the level of customer satisfaction with the completed work in terms of the quality of workmanship provided by the Contractor during the completion of the work.
- KPI 5            Jobs completed within Contractor's target date**  
Measures the number of jobs classified as emergency, urgent, routine, adaptation and change of tenancy completed outside the Contractor target date.
- KPI 6            Customer's perceived service failure**  
Measures the number of recalls issued to the Contractor as a result of customer contact. The reason for the recall is recorded as one of the following:  
1) recall to the Contractor;  
2) poor workmanship;  
3) work not complete and beyond target date;  
4) job recorded as complete and not complete; and  
5) service failure, Contractor has failed to respond to any of the above.

9.37 The KPI are classified as:

- > 90% - acceptable;
- > 75% - 90% - unacceptable; and
- > <75% - fail.

## Summary of findings for all contractors

IX

9.38 The KPIs scores (as prepared by the NIHE) have been summarised as follows:

	KPI 1	KPI 2	KPI 3	KPI 4	KPI 5	KPI 6
<b>Leeway</b>						
Belfast 5	f	f	a	a	u	f
<b>Carillion</b>						
Castlereagh	u	f	a	a	a	f
Lisburn Antrim St	u	u	a	a	a	f
Lisburn Dairyfarm	a	f	a	u	a	f
<b>H &amp; A</b>						
Ballymena	a	f	a	a	a	u
Bangor	a	a	a	a	a	u
Carrickfergus	a	u	a	a	a	u
Larne	a	f	a	a	a	u
Newtownards	a	u	a	a	a	u
<b>Mel Davison</b>						
Armagh	a	f	a	a	a	a
Banbridge	a	f	a	a	a	u
Lurgan/Brownlow	a	a	a	a	a	a
Portadown	a	a	a	a	a	a
<b>Omega</b>						
Collon Terrace	a	u	a	a	a	a
Waterloo Place	a	a	a	a	a	u
Waterside	a	a	a	a	a	u
<b>PK Murphy</b>						
Antrim	a	u	*	*	a	a
<b>NI Average</b>	a	u	a	a	u	*

\* not measured by NIHE  
 f - fail u - unacceptable a - acceptable

9.39 Based on two months KPIs only, it can be seen that the following districts have more than two KPIs at below acceptable levels:

Contractor	District
Leeway	Belfast 5
Carillion	Castlereagh Lisburn Antrim St Lisburn Dairyfarm

## Summary of findings for all contractors

IX

### NIHE inspection regime

9.40 When a Maintenance Officer ("MO") inspects a property the outcome is recorded as follows (definitions provided by NIHE):

**Inspected – Complete:** a post inspection where the job has been completed satisfactorily;

**Inspected – Not Complete:** a post inspection where the job has not been completed or has not been completed satisfactorily (i.e. SOR code usage, materials or quantities are incorrect);

**Inspection Not Required:** an inspection where there is no requirement for an inspection to be carried out; and

**No access:** an inspection where there has been a failure to gain access to the property.

9.41 We note that for all works orders with a value of £750 or over, it is the NIHE's policy that a MO inspects 100% of these jobs. In addition, we understand that all COTs require inspection. However, we understand that after two inspections, where access cannot be obtained, the works order is paid and there is no further requirement for inspection by NIHE staff.

9.42 Given the nature of building work it is to be expected that a certain level of jobs will result in an unsuccessful inspection (inspection not complete). As such it should be an area of concern warranting further investigation, if districts had unexpectedly low levels of "not complete" inspections. This becomes more of an issue given the level of non-compliant site inspections and the level of financial anomalies identified by VB Evans.

9.43 In the table below we have summarised the inspection details for the whole of Northern Ireland.

	Inspected - Complete	Inspected - Not Complete	Inspection Not Required	No Access
<b>N.I. Average</b>	71.36%	10.64%	0.62%	17.37%

9.44 We are concerned that the not completed inspections represent only 10.64% as we would have expected this percentage to be higher.

## Summary of findings for all contractors

## IX

9.45 In the table below we have analysed the inspection details by contractor and district. This table enables us to identify those districts where the percentages are out of line with the N Ireland average (which as noted above we have concerns with).

	Inspected - Complete	Inspected - Not Complete	Inspection Not Required	No Access
<b>Leeway</b>				
Shankill	61.95%	18.56%	0.33%	19.16%
<b>Carillion</b>				
Castlereagh	63.35%	13.90%	0.08%	22.61%
Lisburn AS	65.89%	12.50%	0.10%	21.46%
Lisburn Dairy	71.15%	17.24%	1.97%	9.64%
<b>H &amp; A</b>				
Ballymena	66.07%	17.18%	1.05%	15.70%
Bangor	63.95%	6.37%	0.26%	29.36%
Carrickfergus	51.32%	6.64%	1.62%	40.34%
Larne	66.74%	18.91%	0.22%	14.02%
Newtownards	69.12%	8.08%	0.12%	22.64%
<b>Mel Davison</b>				
Armagh	71.43%	18.14%	0.00%	9.77%
Banbridge	65.70%	18.43%	0.10%	15.68%
Craigavon	86.81%	4.84%	0.07%	7.89%
Craigavon Lurgan & Portadown	91.64%	5.31%	0.13%	2.92%
<b>Omega</b>				
Collon Terrace	78.79%	6.66%	0.00%	14.34%
Waterloo Pl	70.16%	10.58%	0.05%	19.16%
Waterside	83.61%	12.37%	0.00%	3.91%
<b>PK Murphy</b>				
Antrim	82.44%	7.65%	0.80%	9.01%
<b>N.I. Average</b>	71.36%	10.64%	0.62%	17.37%

## Summary of findings for all contractors

IX

9.46 Based on the table at 9.43 we have summarised below districts with particularly low "not complete" inspection rates or particularly high "no access" rates:

### Inspected "Not complete"

H & A - Bangor

H & A - Carrickfergus

MDC - Craigavon

MDC - Craigavon Lurgan & Portadown

Omega - Collon Terrace

### No Access

Carillion - Castlereagh

H & A - Bangor

H & A - Carrickfergus

9.47 It should be remembered that the table at paragraph 9.43 summarised the results of MOs inspections. VB Evans site inspections were carried out on completed jobs, i.e. jobs that, if required, had been inspected, and passed for payment.

9.48 Of the 598 jobs inspected by VB Evans on which financial anomalies arose, 404 had been inspected by NIHE staff. Given that 404 of these jobs had already been inspected and passed for payment by NIHE staff, it would have been expected that the anomalies found would have been at a very low level.

## Recoupment

### Financial anomalies identified during site inspections

9.49 Our analysis of the NIHE's ability to estimate the total level of financial anomalies across all the work undertaken, based on our sample testing, including the methodology applied, any limitations and caveats associated with this extrapolation is set out in detail under each Section III to VIII. We have summarised in the table below the Category A anomalies and the total estimated Category A financial anomalies (extrapolated findings) over the 9 month period under review and across all work categories and types together with the value of duplicate SORs, arising. Given the non random nature (focused sampling) of Round 2 it is not appropriate to extrapolate the result obtained. The extrapolate values in the table at paragraph 9.48 are therefore based on Round 1 only.

9.50 We draw attention to the fact that the extrapolated findings from the <£100 strata for H & A and the £100 - £750 strata for Carrillion is less robust than that for other districts and strata within those districts. As such caution should be exercised when considering these extrapolated amounts.



**Summary of findings for all contractors**

**IX**

**Duplicate SORs**

9.51 We carried out testing of duplicate SORs which occurred within a six month period. The detailed findings are set out in Sections III to VIII of this report. As no significant issues arose we therefore did not include details of this work within our summary of findings section, however the NIHE should be able to recoup the amounts identified as duplicate SORs. These amounts are set out in the table at 9.50.

**Summary of recoupment**

9.52 We have summarised below the level of recoupment that could be sought from the Contractors based on actual payments made and on the extrapolation of our findings.

Para	Actual amounts £	Extrapolation amounts £	Extrapolated amount as a % of total %
<b>Leeway</b>			
Category A anomalies	[REDACTED]	[REDACTED]	[REDACTED]
Duplicate SORs	[REDACTED]	[REDACTED]	[REDACTED]
<b>Carillion</b>			
Category A anomalies	[REDACTED]	[REDACTED]	[REDACTED]
Duplicate SORs	[REDACTED]	[REDACTED]	[REDACTED]
<b>H &amp; A</b>			
Category A anomalies	[REDACTED]	[REDACTED]	[REDACTED]
Duplicate SORs	[REDACTED]	[REDACTED]	[REDACTED]
<b>MDC</b>			
Category A anomalies	[REDACTED]	[REDACTED]	[REDACTED]
Duplicate SORs	[REDACTED]	[REDACTED]	[REDACTED]
<b>Omega</b>			
Category A anomalies	[REDACTED]	[REDACTED]	[REDACTED]
Duplicate SORs	[REDACTED]	[REDACTED]	[REDACTED]
<b>PK Murphy</b>			
Category A anomalies	[REDACTED]	[REDACTED]	[REDACTED]
Duplicate SORs	[REDACTED]	[REDACTED]	[REDACTED]
<b>Total</b>			
Category A anomalies	[REDACTED]	[REDACTED]	[REDACTED]
Duplicate SORs	[REDACTED]	[REDACTED]	[REDACTED]
	<u>73,279</u>	<u>1,090,057</u>	

\*1 - Based on 1<sup>st</sup> and 2<sup>nd</sup> round Category A anomalies  
 \*2 - Extrapolation of Round 1 Category A anomalies

**Terms of reference****I****Terms of reference**

1.1 On 17 October 2011 ASM was appointed by the Department for Social Development ("DSD" or "the Department") to undertake a forensic accounting review into the works carried out by 6 Northern Ireland Housing Executive ("NIHE" or "Housing Executive") maintenance Contractors. The requirement for this review arose following the issue of our report on one of the NIHE's maintenance Contractors, Red Sky (that forensic accounting review was known as "Project Young").

1.2 The DSD Minister, Nelson McCausland, instructed that a forensic accounting review be carried out on a sample of Housing Executive maintenance Contractors, including those Contractors to whom the contracts previously held by Red Sky were reassigned (i.e. H & A Mechanical Services, Carillion (formerly White Horse F M Group) and PK Murphy Construction Limited). The period of this review was to cover work completed by the 6 Contractors in the 9 month period from 1 September 2010 to 31 May 2011 (this time period was restricted due to the fact that two of the three Contractors assigned to the Red Sky contracts only held response maintenance contracts since September 2010).

1.3 Based on information provided by DSD in respect of the number and value of jobs undertaken by all NIHE Contractors within the 9 month period from 1 September 2010 to 31 May 2011, it was determined that the 3 additional Contractors which would be the subject of forensic accounting review were: Mel Davison Construction, Omega Mechanical Services and Leeway Maintain Limited (as these Contractors "ranked" within the top 5, in terms of the value of jobs completed, along with H & A Mechanical Services and Carillion).

1.4 We have been instructed to review and report on the following:

- a) the quality of the workmanship undertaken;
- b) whether the invoices submitted by the Contractors and paid by the Housing Executive were appropriate within the context of the work requested and the work actually carried out;
- c) whether the inspection regime in place within the NIHE operated as expected;
- d) whether the key controls in place to manage contracts, to ensure that the quality of works undertaken was monitored and price variations were identified, valued and approved, were adequate and operated effectively;
- e) the classification of any anomalies identified during the 1<sup>st</sup> and 2<sup>nd</sup> round inspections; and
- f) an extrapolation of our findings to determine the possible level of any overcharging / errors.

1.5 We were instructed that as far as practicable, our review and the reporting of our results should follow the approach adopted in respect of Project Young (i.e. the Red Sky review).

## Terms of reference

I

### The information provided to us and the context of our report

1.6 We have based our analysis and conclusions on the information provided to, and obtained by, us. This consisted of:

- ◆ information obtained directly by ASM from the NIHE's Repair Response computer system (which is known as "HMS");
- ◆ information extracted from HMS, in the form of detailed Microsoft Excel reports, which were compiled by the NIHE's Information Technology ("IT") department based on our instructions; and
- ◆ direct inspection of work carried out by the Contractors across its contracts (these inspections were carried out on our behalf by VB Evans & Co ("VB Evans"), Chartered Quantity Surveyors and Construction Cost Consultants).

1.7 We draw attention to the fact that we have relied on the information provided by the NIHE IT's department. We note that this information has not been verified or checked on any basis in the nature of an audit.

1.8 We have relied upon the site inspections carried out by VB Evans and the findings and recommendations made by them from these inspections.

1.9 As instructed whilst carrying out the review we did not correspond with the Contractors or any other third party who may have been involved in the contracts or discuss the detail of our findings with NIHE. In these circumstances we have not had the opportunity to confirm certain facts which may render the analysis and conclusions drawn therefore incorrect.

## Terms of reference

I

### Progress reporting

1.10 In addition to undertaking site inspections and desktop review we were also required to keep the DSD appraised of the progress of the review. We also met with the NIHE to advise them of any difficulties that we were encountering in carrying out our review. Meetings were held on the following dates:

Date	Purpose of meeting
<b>Initial meetings</b>	
25-Oct-11	Meeting with NIHE, including the Chief Executive, regarding the commencement of the review
27-Oct-11	Meeting with NIHE IT personnel to discuss information requirements
<b>Meetings with DSD Oversight Committee</b>	
02-Dec-11	Reporting to DSD on progress of the review and advise of any issues arising
09-Jan-12	Reporting to DSD on progress of the review and advise of any issues arising
13-Feb-12	Reporting to DSD on progress of the review and advise of any issues arising
07-Mar-12	ASM presentation of 1st Round findings and discussion of the next stages of the review
13-Apr-12	Reporting to DSD on progress of the review and advise of any issues arising
03-May-12	Reporting to DSD on progress of the review and advise of any issues arising
29-May-12	Reporting to DSD on progress of the review and advise of any issues arising
21-Jun-12	Reporting to DSD on progress of the review and advise of any issues arising
<b>Meetings with NIHE</b>	
08-Nov-11	To discuss with NIHE any difficulties ASM were having in respect of progressing the review
22-Nov-11	To discuss with NIHE any difficulties ASM were having in respect of progressing the review
06-Dec-11	To discuss with NIHE any difficulties ASM were having in respect of progressing the review
15-Mar-12	To inform NIHE of the next stage of the review
19-Apr-12	To discuss with NIHE any difficulties ASM were having in respect of progressing the review
<b>General</b>	
03-Nov-11	Planning meeting with Michael Woods (DSD)
21-Dec-11	Meeting with Michael Kavanagh (NIHE) to discuss system/policy changes implemented since ASM's previous review
<b>Main Attendees at key meetings:</b>	
<b>Meetings with NIHE</b>	<b>Meetings with DSD Oversight Committee</b>
Michael Woods (DSD)	Jim Wilkinson (DSD)
Elizabeth Findlay (NIHE)	Michael Sands (DSD)
Gerry Flynn (NIHE)	Susan McCarty (DSD)
Nicola Niblock (ASM)	Michael Woods (DSD)
	Peter Murchan (DSD)
	Samuel McCrigan (DSD)
	Nicola Niblock / Brian Clerkin (ASM)

### Limitation of scope, liability and circularisation

1.11 This report has been prepared for DSD for the sole purpose of allowing it to consider the matters set out in our Terms of Reference.

**Terms of reference**

**I**

1.12 No duty of care, or liability, is accepted to any party other than DSD. This report should not be released beyond DSD without our prior written notice. In the event that DSD wishes to release our report to any third party that party should be advised that we have no duty of care to any party other than DSD.

1.13 In the event that we find ourselves subject to any claim from any other party arising out of your release of this report any claim established against us, and the cost, including legal costs, that we necessarily incur in defending it, will form part of the expenses that we will recover from you.

1.14 No responsibility is accepted for any reliance placed upon the report should it be used for any purpose other than that stated above. Nothing in this report should be construed as expressing an opinion on a point of law.