HIGHWAYS AGENCY

Safe roads, reliable journeys, informed travellers

NOT PROTECTIVELY MARKED

AUDIT OF INCIDENT AND NEAR MISS REPORTING

FINAL REPORT

REPORT NO. 11_910

Audit Statistics	
Fieldwork started:	**01 March 2011**
Fieldwork completed:	**01 April 2011**
Draft report issued:	**12 December 2011**
Final report issued:	**21 December 2011**
Audit Manager:	"[redacted under Section 40 (2)]".
Auditor(s):	**System Concepts**
Circulation - Report:	"[redacted under Section 40 (2)]". **(NSD)** **Ginny Clarke (Director, NSD)**
Circulation - General:	Graham Dalton (Chief Executive and Accounting Officer) Alan Cook (Non-Executive Chair) Stephen Dauncey (Director, FBS) Peter Adams (Acting Director, MPD) Derek Turner (Director, NDD) Simon Sheldon-Wilson (Director, TMD) "[redacted under Section 40 (2)]". (Group Manager, NetServ) HA Audit Committee Members "[redacted under Section 40 (2)]". (Head of Audit and Assurance, FBS) Ian Coates (Group Head of Internal Audit, DfT) Nick Bateson (National Audit Office) "[redacted under Section 40 (2)]". (National Audit Office)

An executive agency of the Department for Transport

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Disclaimer:

We have prepared this report solely for the use of the Highways Agency following an audit conducted at a point in time and was not written for any other purpose. Therefore, we take no responsibility for any reliance that a third party (i.e. other than the Highways Agency) may place on it. Where this report has been made available to a third party, it is on the understanding that the third party will use the report only for the purpose agreed and will not distribute it or any of the information contained in it outside of the third party. If such an external third party were to obtain a copy, without our prior written consent, we would not accept any responsibility for any reliance that they might place on it. Matters raised in this report are only those that came to our attention during the course of our internal audit work and are not necessarily a comprehensive statement of all the weaknesses that exist or all improvements that might be made. We emphasise that the responsibility for a sound system of internal controls and the prevention and detection of fraud and other irregularities rests with management and work performed by internal audit should not be relied upon to identify all strengths and weaknesses in internal controls, nor relied upon to identify all circumstances of fraud or irregularity.

EXECUTIVE SUMMARY

Introduction

1. The objective of this review was to provide independent assurance to the Accounting Officer on the adequacy and effectiveness of the Agency's arrangements for accident / incident and near miss reporting.

2. As part of this audit we have:

   a) conducted a usability review of the Accident and Incident Report System (AIRS) and the Incident Report and Investigation System (IRIS);

   b) considered arrangements for the maintenance of systems;

   c) determined whether data collected is sufficient in breath and depth and how statistics and reports are generated and used;

   d) determined whether arrangements ensure complete collection of incident data; and

   e) questioned a random sample of staff to identify awareness of systems; how (or if) they use systems; views on user friendliness; reasons for non-use and value of feedback received.

3. The scope and approach of this review was agreed with the Head of the National Health & Safety Team (NHST). Further details of this can be found at Appendix A.

4. The work was undertaken by Systems Concepts, on behalf of Audit & Assurance (A&A).

Background

5. The Agency has two accident reporting systems, which serve the purposes of meeting legal requirements and providing a tool for collecting accident data from both staff and contractors; and aiding the prevention of future accidents. IRIS is used by internal Agency staff including office staff, Traffic Officers and any contractors or temporary staff based in these roles. AIRS is used by contractors in the Major Projects and Network Delivery Directorates, and includes construction workers and Managing Agent Contractors (MACs). Both systems are off-the-shelf packages which have been partially customised for Agency use (particularly where IRIS is concerned).

6. Employers are required under Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) to report (to the HSE) any work-related deaths and major injuries to employees; any injuries to employees resulting in more than

three days off work; near misses; and occupational ill health. IRIS is fundamental to the Agency meeting its responsibilities under RIDDOR.

7. The two systems vary in their approach; however, both have inputting and reporting functionality. All staff within or contracted to the Agency should have access to one of the systems to input accident data. Certain designated staff also have access to the reporting functionality. Each user that can view and / or create reports has access only to data relating to their own directorate.

8. In delivering this assignment we:

a) reviewed both systems with NHST, to familiarise ourselves with them, discuss the most common queries and problems raised, and understand their own views about the system;

b) sent an email link containing a survey on the usability of IRIS to 100 HA staff;

d) surveyed 181 Agency staff and contractors on the usability of AIRS;

e) held in-depth interviews with three staff and two contractors on their use of AIRS;

f) held in-depth interviews with five staff who regularly use IRIS; and

g) reviewed IAN128/10 which provides HA contractors with guidance on when to use AIRS and the information they are expected to report.

9. We should like to thank NHST staff, particularly "[redacted under Section 40 (2)]"., for their cooperation during the course of this review.

Audit Opinion

Partial	Not all Agency staff are fully aware of reporting systems and the requirement to report incidents under RIDDOR legislation. There is under reporting of incidents by both Agency staff and contractors; and some significant difficulties experienced by contractors in accessing and updating the AIRS database

This opinion reflects weaknesses found at the time that fieldwork was undertaken, and the fact that failure to achieve full compliance could have significant consequences. We acknowledge that actions taken between the completion of fieldwork and the issue of this report (some of which have been prompted by the review) should have a positive impact on the control environment.

Key Findings

10 Due to the differences in each system and to avoid confusion we have reported our findings from our reviews of IRIS and AIRS separately.

Challenges

The following challenges have been identified:

11 IRIS

- 12% of respondents were unaware of IRIS and therefore would not know how or where to report an accident. Others had poor understanding of reporting requirements under RIDDOR;
- some staff have received little training on the system;
- few fully understand the reporting system and how it works; all staff surveyed rely upon standard reports that have been set up by others and which they have copied. Some advised that they have little confidence in the reports that they run, as the set up could be wrong - leading to the generation of erroneous information; and
- at least one near miss involving senior management was not reported due to a lack of understanding of reporting requirements.

12 AIRS

- only 77% of survey responders advised that they report all accidents. Others don't because they fall outside the Agency criteria outlined in IAN 128/10; or because they have had problems accessing the system;
- access to AIRS is widely reported as being problematic. There are only three ways of gaining access to the system, which vary from being relatively reliable but expensive to very slow and slightly less expensive. All take time to implement. Some of these issues, however, would appear to relate to "external" issues (for example, access via Citrix);
- obtaining security sign-off has also proved difficult. This may take weeks and if a contractor is a new graduate or new to the country, references are very hard to obtain. There is anecdotal evidence of contractors sharing log-on details;
- processing of data entry is very slow (slower than for IRIS) and some contractors report not having had the time to input details of near-misses;

- although the NHST have provided some training to users, all interviewees within the selected sample advised that they had had to train themselves. Many find the system difficult to use;

- there is a lack of confidence in the accuracy of reports generated and rolling Accident Frequency Rates (AFRs) data needs to be reviewed every month (to ensure that contractors have recorded all data correctly);

- there is little confidence that minor accidents are accurately captured, and even less that near misses are correctly shown; and

- there are a number of issues relating to the way that software has been set up. Whilst some can be categorised as “annoying”, in some cases they may lead to data being wrongly recorded.

DETAILED FINDINGS & MANAGEMENT ACTION PLAN

No	Findings	Unmanaged Risk	Action Priority (H/M/L)	Agreed Management Action	Officer Responsible, Target & Implementation Dates
Scope Risk Area: IRIS Training / information issues					
1	12% of respondents had not heard of IRIS. The users we interviewed commented that they were unsure how others would know about IRIS as they do not think that it is widely used or publicised.	Lack of awareness of need to report an accident may impact on the Agency's ability to ensure that all accidents are recorded appropriately.	**Medium**	A – IRIS reporting requirements to be publicised (via Update or similar medium).	"[redacted under Section 40 (2)]". Target 31 May 2011 Implemented 19 May 2011
2	Staff are unsure how to use the system. Most use it infrequently and are unsure how to respond to questions raised by the system.		**Medium**	B – Super-users to be identified and trained, to assist staff.	"[redacted under Section 40 (2)]". Implemented 31 October 2011
Scope Risk Area: IRIS system issues					
3	There are a number of issues relating to weaknesses within the automated system, as follows: (i) conflicting data may to be entered (for example it is possible to select a minor incident [level 3] but later advise that hospital treatment was required); (ii) the user is unable to review all information on one page prior to submission; (iii) there is no default Information: for example, the system will not recognise a user / location nor automatically register a staff number.	Accident records may contain conflicting information which impacts on the integrity of records.	**Medium**	C – IRIS test environment to be established. D – enhancements to be undertaken to address issues (i), (ii) and (iii).	"[redacted under Section 40 (2)]". Target 31 January 2012 Implemented 08 February 2012 "[redacted under Section 40 (2)]". Target 29 February 2012

No	Findings	Unmanaged Risk	Action Priority (H/M/L)	Agreed Management Action	Officer Responsible, Target & Implementation Dates
					Implemented 30 March 2012
4	The paper accident and near miss forms used by Agency staff do not match questions in IRIS. This means that if an incident is entered by someone other than the injured party this could lead to guesswork. We asked a number of interviewees how they would enter details of a particular accident and each person chose different boxes under "type of accident".	Accidents entered into the system could potentially be wrong or misinterpreted.	**Medium**	E – Near miss form to be updated so that it is in line with the electronic version.	"[redacted under Section 40 (2)]". Target 31 January 2012 Implemented 30 March 2012
Scope Risk Area: AIRS Training / information issues					
5	Little training has been provided to users. Contractors advised that they had learnt by trial and error, others had to ask colleagues for advice and many commented on needing training to understand the system. Training for contractors is particularly important as some directorates reported that they will soon be using a Severity Weighted Accident Frequency Rate (SWAFR) which will include minor accidents. The Agency staff reported that they would not have time to sense check all minor accidents so would need to rely on contractors inputting these correctly. Many contractors commented that the system does not give any feedback; that they do not know where the reports go; or what happens to them. Further, error messages are felt to be unhelpful. Users also advise that there is no facility to amend an accident report once details have been entered. Investigation has identified, however, that these issues relate	Failure to understand the system and its requirements may result in greater likelihood of mistakes, or even under-use.	**Medium**	F – AIRSWeb user Group to be established to discuss concerns and address user requirements. G – Revision of IAN 128/10 (see Rec J) to include guidance on saving data so that amendments may subsequently be made.	"[redacted under Section 40 (2)]". Target 31 December 2011 Implemented 5 December 2012 "[redacted under Section 40 (2)]". Target 30 April 2012 Implemented 20 April 2012

No	Findings	Unmanaged Risk	Action Priority (H/M/L)	Agreed Management Action	Officer Responsible, Target & Implementation Dates
	largely to a failure to understand the system and its requirements.				
Scope Risk Area: AIRS System issues					
6	There are three main ways to access the AIRS system: (i) via a leased line at high expense and time (but once installed this method is reliable); (ii) an ISDN line which is cheaper, slightly quicker to put in place but slow; and (iii) a dial up connection which is very slow but lowest cost. Even if a dial up line is chosen a project may have finished or be in its closing stages before a contractor even has access to AIRS. Related issues are restrictions imposed by dial-up connections (only available between certain working hours); and difficulties in obtaining security clearance for staff. A number of perceived system failings (see section 5 above) appear on investigation to relate to lack of understanding / training.	Accidents may not be recorded as contractors struggle to access to the system during the first few months of their contract. Access difficulties may result in the sharing of passwords or other IT malpractice.	**High**	H – A business case should be produced for moving AIRS outside of the government fire wall and approvals sought. I – Implementation of the approved business case solution. J – IAN 128/10 to be revised and reissued to reflect this change.	"[redacted under Section 40 (2)]". Target 31 December 2011 Implemented 12 December 2011 "[redacted under Section 40 (2)]". Target 31 March 2012. Implemented 01 May 2012. "[redacted under Section 40 (2)]". Target 30 April 2012 Implemented 20 April 2012

Appendix A - Assignment Scope / Terms of Reference

AICD WP 01a

ASSIGNMENT SCOPING DOCUMENT

☐ Initial Scoping Document

2.0 Revision Number Of Scoping Document

The contents of this document were approved by the HIA on: *[Insert Date*]
The contents of this document were agreed with Client on: [*Insert date*]

Risk Area: Incidents and near miss reporting	**Related Systems:** N/A
Lead Auditor: "[redacted under Section 40 (2)]".– System Concepts	**Budgeted days**: 15

Key Areas for Consideration:

This assignment will consider Agency requirements for incident and near miss reporting and the effectiveness of existing arrangements

Approach to the audit and key client staff to be involved in the process:

1. Conduct a usability review of Accident and Incident Reporting System (AIRS) and Incident Reporting and Investigation System (IRIS), with an expert user conducting task walk-throughs to identify how suitable systems are for intended use (provision of management information and legal compliance)
2. Consider arrangements for maintenance of systems
3. Determine whether data collected is sufficient in breadth and depth; and how statistics and reports are generated and used
4. Determine whether arrangements ensure complete collection of incident data
5. Question a random sample of staff / workers to identify awareness of systems; how (or if) they use systems; views on “user friendliness”; reasons for non-use; and value of feedback received
6. Data analysis and reporting
7. Project management

We will look at whether the incident and near miss reporting systems cover

everything they should, are used by all, are accessible and usable and that the data produced is useful for both incidents and near misses.

As AIRSWeb is populated by supply chain contractors, arrangements will need to be made (through relevant HA contract managers in MP and NDD) to interview a selection of users. Interviews will also be arranged with systems support staff (from both HA and Atos Origin).

"[redacted under Section 40 (2)]". will arrange interviews with NHST and other relevant staff. Face-to-face meetings will be arranged whenever possible. System Concepts will travel to the relevant HA office to meet with staff so please ensure that if several respondents are based in, say, Birmingham, we can interview them all on the same day. Two hours should be allowed for each interview (plus sufficient travel time as System Concepts are based in London).

"[redacted under Section 40 (2)]"., "[redacted under Section 40 (2)]". and "[redacted under Section 40 (2)]". will carry out the work. The former two consultants were all involved in the H&S audits carried out for the HA and are familiar with the work of the Agency. The lead contact will be "[redacted under Section 40 (2)]"., System Concepts office tel. no is 02072403388.

"[redacted under Section 40 (2)]".

"[redacted under Section 40 (2)]".

"[redacted under Section 40 (2)]".

Exclusions: none

Investment Decision Maker: Ginny Clarke (Netserve Director)

Project Owner: "[redacted under Section 40 (2)]".

Project Sponsor: "[redacted under Section 40 (2)]".

Timescales

Start Date:

Expected Date of Completion of Field Work: 31 March 2011

Expected Date of Issue of Reports: 31 March 2011

Publication: Please note that once AICD reports have been finalised, it is now normal practice for them to be made available on the AICD portal community (refer to covering letter attached to this scoping document).

Appendix B - Categorisation of Audit Opinions and Findings

This is an exception report. It addresses only those areas where action is needed to strengthen control. The absence of comment on a particular area means that, within the defined scope and time of our review, we found that controls were operating effectively.

Audit Opinions

Opinion	Explanation
Full	Systems of corporate governance, risk management and internal control are fully established, documented and working effectively.
Substantial	Systems of corporate governance, risk management and internal control arrangements are well established and working effectively. Very minor control weaknesses have been identified in a maximum of one or two discrete areas.
Reasonable	Systems of corporate governance, risk management and internal control arrangements are generally established and effective, with some minor weaknesses or gaps identified.
Partial	Systems of corporate governance, risk management and internal control are present and operating effectively except for some areas where material weaknesses or significant deficiencies have been identified, aspects of the control arrangements need documenting, or evidence does not exist to demonstrate effective operation.
None	Systems of corporate governance, risk management and internal control are poorly developed or non-existent or major levels of non-compliance or non-conformance have been identified. Control arrangements are not adequately documented, or evidence does not exist to demonstrate effective operation.

Audit Findings and Corrective Action: Definitions of Priorities

Priority	Explanation
Low	Minor weakness in control which expose the Accounting Officer / Director to relatively low risk of loss or exposure.
Medium	Significant weaknesses in control, which, although not fundamental, expose the Accounting Officer / Director to a risk of loss, exposure or poor value for money
High	Fundamental weaknesses in control which expose the Accounting Officer / Director to high risk or significant loss or exposure in terms of failure to achieve key objectives, impropriety or fraud