

**HSC/E AGRICULTURAL INDUSTRY ADVISORY COMMITTEE (AIAC)
TRANSPORT PROJECT GROUP
&
ENERGY NETWORK ASSOCIATION
'AGRICULTURE ENGAGEMENT GROUP'**

Summary of joint meeting: AIAC Transport Group 3rd Workshop and 1st ENA 'Agriculture Engagement Group', held at HSE Stoneleigh on 13 December 2006.

Present:

Alan Plom (Chair)	HSE Agriculture & Food Sector (Head, Safety Section)
Jake Vowles	Agricultural Engineers Association (AEA) Director General / AIAC member
Ian Beeby	TGWU - (Chair of TGWU's Rural Industries H&S Committee)
Michael Britten	NFU - Health, Safety and Skills Development Advisor
Mike Simpson	Contractor/National Association of Agricultural Contractors (NAAC)
Nikki Etherton	British Agriculture & Garden Machinery Association (BAGMA)
Ian Jones	BAGMA / RTR Solutions
Garry Rudd	Agricultural Industries Confederation (AIC)
Andy Scarlett	Scarlett Research Ltd
Nigel Davey	Consultant / Member of IoSH Rural Industries Group Cttee & Chair of IoSH East Anglia Gp + Food Industry H&S Network (FISHNet)
David Owen	Lantra Awards - (Business Development Manager)
Peter Coyle	Energy Network Association (ENA) – (Safety Health & Environment Manager)
Andrew Sharman	Scottish Power (H&S Development Manager) / Member of ENA Public Safety Committee
Paul Gilson	HSE - Specialist (Electrical) Inspector
Peter Vujanic	HSE - Electrical Network Team (ex-DTI Engineering Inspector)
Tony Mitchell	HSE - Agriculture & Food Sector (Transport)
Frances Hirst	HSE - Agriculture & Food Sector (Arboriculture)

Apologies received from:

David Leavesley (NFU Mutual/AIAC member)
 Tim Drew (Lantra - Sector Skills Council)
 Ken Hardgrave (Chair of AIC's Transport Group)
 Marcus Themans (farmer/NFU member of AIAC)
 David Knowles (ADAS/Chair of IoSH Rural Industries Group)
 Steve Gillingham (Department for Transport – Head of Commercial Vehicles and Regulation - Transport, Technology and Standards)
 Nigel Lilley (National Grid / Chair of ENA Public Safety Cttee)
 Carol Grainger (HSE, Workplace Transport Programme Manager).

1. WELCOME AND INTRODUCTIONS

1.1 Alan Plom (Chair) welcomed the ENA representatives, HSE staff and other delegates to this joint HSC/E and ENA 'Workshop', intended to focus on safety in relation to overhead power lines (OHLs). This was the third workshop convened by the AIAC Agricultural Transport Project Group since it first met in August 2005 and he thanked ENA for their sponsorship of the event

Unfortunately, AIAC member David Leavesley and David Knowles were both unable to attend at the last minute due to other urgent business meetings and Tony Mitchell and Ian Jones could only stay for the morning session, due to other engagements.

1.2 The Chair explained that the Group was set up by the HSC's AIAC as a 'task and finish' working group with the objective of reducing workplace transport-related accidents - the major cause of fatalities and injuries in the agriculture sector. The key overall aim of the Group was to encourage exchange of information between HSE and stakeholders, to promote joint working and coordinate publicity initiatives. These occasional Workshops provide a forum to build on previous discussions, identify new activities and progress made since the last meeting and to encourage regular communications between members as well as HSE and industry organisations. The discussions also inform and help to develop HSE's agricultural transport-related projects and the overall Workplace Transport Programme. Dr Andy Scarlett (ex-Silsoe Research Institute and research contractor for HSE, other Government Departments and manufacturers) had again been invited to review recent research and highlight potential work for the future.

1.3 The draft notes of the last meeting held on 8 March 2006 were accepted (as amended by J Vowles). These will be placed on the 'open' AIAC page on HSE's website. Actions and matters arising would be picked up during the course of the meeting.

ACTION – HSE to put minutes on AIAC website. [DONE]

[Chair's Note: The attached Appendix provides a summary of agreed 'deliverables' and actions.]

2. ENERGY NETWORK ASSOCIATION–AGRICULTURE ENGAGEMENT GROUP

2.1 Peter Coyle explained the structure of the industry and outlined the role of ENA, the body representing and funded by the UK gas and electricity transmission and distribution companies. ENA's "Safety, Health and Environment Committee" (SHE) had identified agriculture as a priority sector to target for accident reduction and wished to open up dialogue with the agricultural community to develop appropriate and effective guidance, as part of the HESAC (H&S Advisory Committee) 'SAFELEC 2010' initiative.

2.2 The terms of reference of ENA's Public Safety Committee (PSC), which reports to the SHE Committee and gives it strategic direction, are:

- To review the application of the Electricity Safety Quality and Continuity Regulations (ESQCR) and to share 'good practice';
- To identify and share publicity initiatives and to identify where national publicity might usefully be employed;
- To review and update, as appropriate, existing ENA publicity materials;
- To review and consider public safety educational material.

ACTION - ENA Powerpoint presentation to be placed on HSE/AIAC Webpage. [DONE]

2.3 The PSC/ENA want to use their successful campaign to reduce accidents in angling, (ie from fishing rods contacting OHLs) as a model for influencing other industries. To do this, they need to engage with HSE, landowners, employers and employees organisations as well as equipment manufacturers. The AIAC Transport Group provided a ready-made 'Agriculture Engagement Group' to consult relevant key organisations in the industry.

2.4 A series of graphs based on the DTI's incident database illustrated the significant accident history involving the electrical network over farm land. In the 10 years to 31 March 2005, 128 members of the 'public' (ie non-electrical workers) were killed by 'contacts' with power lines. Of the fatalities caused by contact with OHLs, 16% involved tipper trailers, hiabs and cranes (55% of these occurred at farms, mostly on roads and in fields). Ladders and poles were involved in 13% of the OHL contacts. Of these, 27% were reported to have occurred at farms (mostly in fields), 16% on the highway, but the remainder occurred at unknown locations. Utility arboriculture is also a significant contributor, with tree climbing and tree cutting being involved in 4% of the fatal incidents. Fishing and boat mast contacts each accounted for 2% of the total fatalities. In addition, ~300 injury incidents are reported each yr (a total of 3,357 over the 10 years to 31/3/05), nearly half of these being caused by contact with underground equipment but 17% involved OHLs (12% being caused by contact with conductors and 5% with OHL supports). A further 2-5,000 'near misses' are reported every year under the ESQCR reporting regime.

2.5 ENA have produced several relevant 'public safety' leaflets, including "Safety Information for Farmers and Agricultural Contractors" (March 2006 v1) and 'Engineering Recommendation' G55/1: "Safer Tree Working in Proximity to Overhead Electric Lines". ENA are reviewing this guidance, but wish to find new ways to influence farming and associated industries, including forestry and arboriculture.

2.6 HSE has also published guidance on working near OHLs specifically for agriculture, eg in 'Farmwise' and various other leaflets - in particular Agriculture Information Sheet AIS18(rev) "Avoidance of Danger from OHLs in Agriculture" and INDG389 "Shock Horror" (recently reprinted). Advice specifically for forestry and arboriculture is given in relevant AFAG leaflets and in particular AFAG 404 "Electrical Utility Arboriculture" (last printed in August 2006), AFAG 804 "Electricity at Work : Forestry and Arboriculture" (July 2004, but under revision), and "Management of Electricity at Work: Forestry and Arboriculture" (ISBN 1 9017 5800 1). In addition, a number of HSE's other general publications are relevant, in particular the priced Guidance Note GS6 "Avoidance of Danger from Overhead Electric Power Lines".

2.7 Electrical hazards, including OHLs, are also covered in HSE's on-line 'Self Assessment Tool', devised to help farmers to carry out risk assessments and direct them to relevant guidance. This is also available in CD format, copies of which are given to farmers together with 'Farmwise' and other relevant leaflets at HSE's Agricultural 'Safety Health and Awareness Days' (SHADs). HSE's Agriculture Sector also hoped to start a project to produce guidance for those working in and on glasshouses and plastic structures. This would include the risks of contact with OHL's during erection and cleaning.

ACTION - HSE, AEA, BAGMA, etc - Machinery dealers and other suppliers should be made aware of relevant leaflets and copies could be provided, for distribution to their clients. This could also be promoted through HSE's Agriculture e-Bulletin and Arboriculture News, both produced and issued by the Ag Sector.

2.8 HSE's Guidance Note GS 6 is currently being reviewed and revised by Paul Gilson. Paul explained that this is not a major re-write and he needs to contact others involved in producing new guidance or revising existing leaflets to ensure that they are consistent, eg in terms of specified safety distances/proximity zones. Paul has already contacted the electricity supply companies, who now have a more proactive role under ESQCR. Each company seems to have its own rules and standards. He had received no strong objections from them so far, but is awaiting their general agreement and acceptance.

ACTION – Sector and other Group members to inform Paul Gilson of anyone

revising/producing relevant guidance. Paul to circulate revised draft when available (via AIAC Group).

2.9 Andrew Sharman reported that Scottish Power and other companies have already spent considerable sums publicising electrical hazards, eg producing articles and featuring this topic at Shows such as the Royal Highland, as well as producing guidance material aimed at specific industries as well as for the public in general. For example, Western Power Distribution has recently produced a DVD aimed at the construction industry, (which he suggested could be circulated to farmers). However, these local initiatives have not been coordinated to maximise impact.

ACTION – HSE Ag Sector to obtain a copy and consider relevance/use for farmers and ENAs Public Health and Safety Committee/SHE to consider further. [ACTION TAKEN: A Plom attended ENA’s Public Safety Task Force meeting on 24.1.07.]

2.10 The Chair explained HSE’s current position and restrictive arrangements for producing guidance material. All publications need to be justified by a business case (considering their potential contribution to HSE’s PSA targets to reduce fatalities, injuries and ill health) and have to be approved at Director level. It was agreed that a new approach is needed, working together with the industry stakeholders to share knowledge and experience of what works, and to identify and use our respective networks to influence those working in the industries and in control of operations.

2.11 Effective communication is vital and we need insight into how best to get the message across to all involved in the industry. Members advised that a wide range of media and trade journals should be used (not just Farmers Weekly, but also Farmer’s Guardian, Farm Contractor, forestry journals, etc). Case studies are also needed to help present the ‘business case’ for health and safety. The Group had previously explored this through the NFU Mutual and the AIC (Agricultural Industries Confederation) whose members include feed producers and distributors. Michael Britten confirmed that the NFU are keen and able to distribute information to farmers particularly through the NFU’s Business Guides and Technical Bulletins as well as Branch Journals, eg to alert farmers to hazards and ensure their equipment and risk assessments are up to standard. He also felt that ‘shock messages’ are more effective at grabbing attention and persuading farmers to adopt good practice.

ACTION – Examples and information still needed from Members to produce case studies for publicity.

2.12 Michael observed that although farmers are not keen to attend safety ‘lectures’, HSE’s programme of Safety and Health Awareness Days (SHADs) had successfully reached and influenced a large number of farmers (approx 10% of the self-employed/family-run farms in GB). Alan reported that this approach has been successfully extended to forestry (targeting works managers and contractors) as well as to arboriculture ‘clients’ (eg contracts managers in local authorities, highways maintenance, building companies and national bodies). The TGWU, the National Association of Agriculture Contractors (NAAC) and others were also supportive of this approach and Members considered that farming SHADs should be extended to employers and employees.

ACTION – HSE to consider extending scope of SHADs. [Chair’s note: Proposal for a pilot ‘joint SHAD’ suggested by NFU and TGWU at AIAC to be considered by HSE in 2007/08. Further discussions needed with NAAC re the potential for ‘contractor SHADs’.]

2.13 It was agreed that the proposed campaign on OHLs should not just be about producing more guidance or publicity but using a range of methods, eg providing warning decals on machines and inclusion in HSE's SHADs. In fact, the NAAC have already produced a decal and provide documentation for their members as part of their model risk assessment.. Alan Plom also referred to the Ag Sector's approach to the Insurance Industry, intended to encourage risk-assessed under-writing as an inducement to improve levels of awareness through training and management of risks. Other potential levers were the HSE's 'Food Chain' project and the various industry assurance schemes, etc.

ACTION – HSE (Alan Plom) to ensure safe working near OHLs is incorporated in relevant scenarios

- Alan Plom to send Andrew Sharman links to reports by Bomel and other researchers into communications in agriculture and the impact of farming SHADs. [DONE]

2.14 Nigel Davy (IoSH) reported that the East Anglia based 'Food Industry Safety and Health Network' (FISHNet - which he chairs) are running a seminar/workshop for its members on electrical safety in late spring. This was intended to raise awareness through a risk assessment approach, highlighting practical precautions during deliveries and collection of loads. It was recognised that better liaison was needed between occupiers, contractors and hauliers. Also, the IoSH Rural Industries Group intend to run Seminars/Networking Events which could be used as a route to promote good practice. The first of the IoSH events is in April 2007, focussing on risks to the public in rural areas and visitors to premises.

2.15 Jake Vowles explained that although 'awareness raising amongst farmers' is really beyond the AEA's remit, they had tried on behalf of manufacturers to set up a meeting with the electricity distribution industry 5-6 years ago, but this offer had not been taken up. This meeting was proposed in the wake of the prosecution of a manufacturer by HSE following a fatal accident involving a crop sprayer, which resulted in a £250k fine. Jake referred to the long-running 'debate' in the European Standards committee on crop sprayers over the design of sprayer booms and limits on height of folding, to avoid contact with OHLs. The AEA had also tried to set up a study at Harper Adams Agricultural College to determine the extent of the problem and to find solutions. Many machines used in agriculture and forestry are not designed or built in the UK and other EU Member States do not appear to have the same problem as UK farmers, working in proximity and low clearance under OHLs. Jake also pointed out that the potential to introduce warning decals in tractors is restricted as these are also controlled by European standards.

ACTIONS - Peter Coyle/ENA and Jake Vowles/AEA to establish contact.

2.16 Members observed that the risk of contact with OHLs is increasing as machinery is getting larger, reducing the clearance distance under OHLs – not just within fields but at entrances from roads. Aerials are commonly being fitted to cabs of combine harvesters and other high machines, increasing the risk of contact or flashover. The BAGMA research on the condition of tractors had revealed poor maintenance of cab windscreens and wipers, which could increase the risk of the driver not seeing an approaching or adjacent OHL.

2.17 The 'safe clearance' distance was a matter of continuing debate and differing advice is currently given. 11kV cables crossing fields cause the greatest concern and the industry consider that OHLs should ideally follow hedge lines, or at least be at the correct height across fields. Members reported that many do not have adequate clearance, eg due to OHL poles not being upright, and maintenance of lines/poles appears to be declining, across the network.

2.18 The design and use of OHL proximity sensors on mobile machinery was also discussed. The AEA are more supportive whereas HSE has misgivings, due to their potential unreliability or insufficient stopping time and spurious/regular warnings being given every time a machine passes near to an OHL. This leads to operators potentially ignoring significant warnings, or turning them off. Devices also have to be reset to work accurately in differing environments, eg to detect different line voltages or varying field/atmospheric/ground conditions. The AEA are aware of work in Australia, and some companies now claim 100% ‘certainty’ for their systems. The potential effectiveness of such devices is increasing as all fields are now mapped electronically (for Government funding/grant purposes) and with the increasing sophistication and use of GPS/Satnav to accurately control vehicle operations within precise parameters and small distances. It might therefore soon be feasible to instal automatic warnings of the location of existing hazards and in the near future to introduce devices to control machines, eg to prevent booms folding in the vicinity of OHL’s. Research is needed to convince HSE/UK to accept these devices.

ACTION – HSE, AEA and the industry to consider options.

2.19 Members felt that a more detailed analysis of the available accident data to identify the type of machine involved in contact incidents would be helpful to help resolve this. Jake also questioned the relevance of some accidents to work activities, eg incidental activities not directly connected with agriculture, such as people using ladders when cutting hedges or picking apples in private gardens.

ACTION – HSE (Peter Vujanic) to analyse the DTI database to provide a more detailed breakdown by type of machine + a summary of line trips and near misses if available..

[DONE]

[Chair’s Note: Available information provided to AEA and a copy of the table produced by Peter is available on AIAC Transport webpage. Nb. This indicates several contacts involved crop sprayers. Andy Scarlett has also since reported that he was aware of a recent OHL contact involving a self-propelled forage harvester.]

2.20 Farmers complain (to NFU, HSE) that it is difficult to get electricity companies to move OHLs, and that it takes too long and is expensive. However, Distribution companies are often not happy to bear the cost of moving lines, eg because farms have expanded and structures erected under or near to OHLs. The new ESQC Regulations (Reg 3) will encourage checking and maintenance of OHLs to ensure adequate clearance in order to maintain continuity of supply. Local DNOs will also be requiring more trees to be cut back to avoid damage to lines. Paul Gilson is seeking agreement with DNOs to standardise and improve their approach, to relieve some of the more extreme situations.

ACTION – ENA + HSE (Paul Gilson) to establish common standards for DNOs.

2.21 Members called for a geographical breakdown of accidents and to identify which type of farmers or contractors are most commonly involved in contact incidents. However, HSE thought that this level of detail would probably be difficult to extract from the available data sources (ie the DTI and RIDDOR databases, or HSE’s investigation reports). Tony Mitchell recalled the old system whereby HSE was informed of line trips caused by contacts with OHLs. This appears to have fallen into disuse over recent years. Although HSE would not necessarily investigate these reports under its current selection criteria, these reports would still be a valuable source of data.

3. THE CURRENT PICTURE – HSE UPDATE

3.1 **Accident History** - Tony Mitchell (manager of HSE’s Agricultural Transport Project) reviewed the latest injury statistics from RIDDOR and other available information. Key points:

- Over the past 5 years, 597 transport accidents in agriculture reported under RIDDOR:
 - 74 fatalities (14 in 2005-06, varying between 12 and 16 /yr).
 - 284 major injuries
 - 239 over-3 day injuries
- Based on the typical 'accident triangle', it is evident that the number of reported 3-day injuries is disproportionate to reported fatalities. It can be assumed that only 20-40% of major and 5% of over 3-day injuries in agriculture are actually reported.
- Transport was involved in ~33% of all agriculture fatalities.
- Most were caused by being struck by vehicles.
- Agriculture contributed 26% of all transport-related fatalities (ie across all industries, including the LA-enforced sector). These equated to 15% of all deaths to employees, 74% involving self-employed and 20% of the public fatalities.
- Uncharacteristically, the traditional seasonal peak during harvest was not apparent during 2006 and in the financial year up to October only 3 transport-related fatalities were known to the Sector. This is appreciably lower than the pattern over the previous 3 years.

3.2 **Agriculture Transport Project** - Tony explained how this project was designed to contribute to HSE's 2005-2008 PSA targets to reduce injuries and ill health and promote the 3 themes of HSE's overarching Workplace Transport Programme, ie "Safe Site, Safe Vehicle, Safe Driver", through the three workstreams described below. However, HSE's field/inspector resources allocated to this project had been considerably reduced this year, the second of this 3-year project. Consequently, there was not much field/inspection activity to report. Key points include:

- **Peak Activity Inspection Campaign** - The Sector are now unable to accurately monitor HSE's field inspection activity, but in any event, this is expected to be lower at the end of the year anyway as the peak activity work period is over. However, where Divisions planned and carried out a specific initiative (i.e. inspection campaign) this resulted in considerable enforcement (63 Notices from 288 contacts). Most of these related to materials handlers (primarily lack of operator training and thorough examination).
- **Joint Enforcement Initiatives** – 12 one-day HSE/VOSA (Vehicle and Operator Services Agency) roadside-checks had been proposed but these had been restricted by HSE's new planning arrangements. Joint VOSA roadchecks were known only to have been carried out in Yorks and Kent so far this year. VOSA had continued to issue many Enforcement Notices on agricultural vehicles though, requiring remedial work or vehicles to be taken off the road. In the case of tractors this was typically as high as 30% of vehicles stopped and ~60% of trailers.
- **Dealer SHADs** - Planning for the 3 Sector-run events scheduled in Q4 in Scotland, Devon and Kent was well advanced but the Yorks/North East and Midlands Dealer SHADs had been cancelled due to budget constraints. However, North West Division had tried an alternative approach, working with a dealer and VOSA at a local show, demonstrating what VOSA look for at roadside checks. This received a lot of interest from the attending farmers. Permitting flexibility in project plans to cater for local knowledge and initiatives was a positive outcome for both HSE and dutyholders.

3.3 In view of the reduction in HSE's field activities, it is unlikely that all of the objectives of the Agriculture Sector's Agriculture Transport Project would be fulfilled. However, the Sector was using whatever information that could be gleaned to continue to raise awareness of the key

issues through publicity, eg Tony had written the 2-page 'Academy' article published in Farmer's Weekly on 1 December. This highlighted the findings of the BAGMA research and advised on 'good practice', particularly maintenance of vehicles for on-road and off-road use.

3.4 Jake stressed that information from HSE and VOSA's inspection campaigns should be shared more widely and quickly to enable dealers, manufacturers and others to make best use of this data. Tony explained that there are restrictions on timing and release of HSE's statistics due to the need for these to be verified for publication, but these are presented to AIAC/Project Group asap. VOSA publish their inspection data on their own website. The findings from the BAGMA research will also be published as soon as the report had been cleared by DfT and HSE Ministers.

ACTIONS - Sector to post Tony Mitchell's ppt presentation on AIAC website. [DONE]

- BAGMA Report to be sent to Members and placed on HSE website. [DONE]

- Members to highlight trends and causes in publicity through their own journals, etc.

3.5 Jake considered that the Department for Transport (DfT) should participate more actively in the AIAC Transport Group and was disappointed there was no representative. He called again for a letter to be written to the DfT by the Chair of AIAC. Alan Plom explained that HSE kept in touch with DfT and had invited them to the meeting but Alan Mendelson - who led on agricultural vehicles - has resigned and not been replaced. Like HSE, they had to (re)prioritise their work.

3.6 Jake was particularly concerned that DfT had failed to produce definitive guidance on the application of the Road Traffic Act/Construction and Use Regulations to tractors, trailers and trailed equipment used on the road - as promised to the AIAC Project Group at its first meeting in August 2005 and requested again at the March 2006 meeting (Min 4.6 refers). Farmers, contractors, feed mills, transport companies, etc urgently need a simple Guidance Sheet covering tractor/trailer weight limits, licensing and braking requirements.

3.7 Alan Mendelson had stated that the DfT would not endorse the AEA's guidance which had been published in journals (eg 'Profi') and available on the AEA's website, because the DfT wanted to check the AEA's interpretation. DfT preferred to base the chart on the guidance published by PC Andrew MacMahon. However, the AEA did not accept that MacMahon's book was up to date, in various areas. The Chair referred to the useful summary note on braking and weight limits produced by Andy Scarlett after the last meeting, which could be used meanwhile (Min 6.6 refers).

3.8 Jake reported that the AEA had raised their concerns with the DfT's Secretary of State (Douglas Alexander) and Minister of State (Dr Stephen Ladyman), DfT officials (including Divisional Manager (TTS) Eric Sampson; Head of Branch TTS6 Ian Yarnold; and Head of Branch TTS7, Steve Gillingham) and taken it up with Ian Yarnold and Mike Lowe at the AEA/DfT meeting on 25 July 2006.

ACTIONS - HSE/Sector to discuss DfT involvement in the AIAC Project Group with Steve Gillingham (DfT) and advise Dr Gibby (Director of HSE's Injury Reduction Programme and Chair of AIAC). [DONE]

3.9 **HSE - Safety and Health Awareness Days (SHADs)** - SHADs are being delivered as part of HSE Ag Sector's 3-year "Self-employed and Family Farms" project (managed by Alan Plom). SHADs are now the main route by which HSE reaches farmers. Up to 350-400 farmers can attend each event, run in two sessions, morning and afternoon. Six 'scenarios' are usually presented by Lantra Awards instructors, demonstrating practical precautions to avoid the main causes of injury and ill health in the industry.

3.10 Scenarios are chosen to reflect the predominant type of agricultural activities in the area, but transport is featured prominently in all farming SHADs (eg use of telehandlers and/or ATVs, vehicle maintenance, reversing aids, etc). Independent research has endorsed the effectiveness of SHADs in influencing farmers to make improvements and they have been widely used in other industries by HSE. The Sector also run 3 forestry SHADs/year (aimed at Forest Works Managers and contractors, and which also include transport-related issues) and 4 arboriculture SHADs/yr (these are aimed at large clients employing contractors such as LAs, highways maintenance and building companies).

3.11 Up to 24 farming SHADs/yr were originally proposed for each of the 3 years of this project, together with local 'novel interventions' intended to identify and try out new and effective ways of influencing farmers. A total of 20 SHADs had been organised around the country during 2006-07 and it was hoped that a similar number would be delivered during 2007-08 (nb. Some smaller ½ day 'mini-SHADs' had been merged into 1 larger SHAD).

3.12 HSE and Lantra Awards had hosted an updating day for SHAD instructors in October. HSE presented the latest data and key messages and VOSA inspectors presented a session covering the findings of their roadside checks and relevant legislation, and demonstrated how and what they look for when inspecting tractors and trailers. The instructors had undertaken to include the latest statistical information in SHAD demonstrations with immediate effect and to consider how best to present the 'Safe On-Road / Safe-Off Road' and 'Safe Stop' messages in the various transport-related scenarios in future.

***ACTION – Lantra Awards to update SHAD transport and maintenance presentations.
[DONE]***

3.13 **Shows and Technical Events** – The Chair reported that transport was again one of the main features at HSE exhibits at the major shows and other events. Practical demonstrations (using Lantra instructors) had been presented on HSE's stand at the 3 national Royal Shows. HSE had produced new display panels for the 2006 season. Based on the "Safe Site, Safe Vehicle, Safe Driver" theme, these included multiple large feature panels displayed in the Stoneleigh office exhibition area and a set of summarised panels for the Royal Welsh and Highland Shows. The extensive set of transport panels on HSE's mobile exhibition unit had also been updated, in time for use at the Cereals, Grassland and Saltex (LA/amenity/landscaping) events. A set of modified panels (which included transport issues) were also produced for the mobile unit used at the APF (Forestry) show and 'Arb Fair'. The APF event also featured a working demonstration by HSL on whole body vibration (WBV) and the launch of new AFAG guidance on steep ground working.

4. REVIEW OF RESEARCH, STANDARDS AND EUROPEAN DIRECTIVES

4.1 BAGMA 'On-farm Vehicle Condition' Research

4.1.1 Ian Jones (who carried out the research but recently left BAGMA) described their project, which had been jointly funded by HSE and DfT. Due to the delay in commissioning and initiation of the study and the need to chase up some dealers for their reports, the final project report was now due at the end of January 2007. The report would be released as soon as it was approved by senior HSE and DfT managers. Ian presented the provisional findings and conclusions.

4.1.2 The survey was intended to include 420 tractors, including 200 from 2 separate five-year age groups, (ie from 1995-2000 and 2000-2005) + 105 trailers. Trained staff from BAGMA

dealers throughout the country carried out the inspections on-farm, using the BAGMA Vehicle Health Check Scheme (VHCS) checklist as a common basis for assessment. However, only 250 inspection report forms had been received from dealers so far. Ian was chasing up dealers for outstanding returns.

4.1.3 The survey indicated that farmers are more positive than negative about the VHCS. Their most common reaction/feedback was that although farmers knew of defects in their vehicles and wanted to put them right + they accepted that improved maintenance raised trade-in values, cost was cited as the major factor limiting maintenance. However, the study showed that most defects were basic and inexpensive to remedy, eg non-working windscreen wipers, lights, etc. The study also found that operators manuals had often been lost or 'misplaced'.

4.1.4 Of particular concern is the prevalence of poor condition of brakes. The study revealed that ~25-30% of the tractors examined veered off a straight line when their brakes were applied. Handbrakes were also commonly u/s. Tyre pressures were unbalanced in 25-30% of cases and tyres were commonly in poor condition on trailers. Excessive wear on tractor hitches and trailer drawbars were also common defects. These findings were consistent with VOSA's observations at roadside checks. Such defects would have been identified (and could have been remedied) had the simple check list in the VHCS been used by farmers.

4.1.5 Ian Beeby commented that he was aware of several major accidents involving inadequately maintained tractors and poor driver training as well as illegal road operations, eg Fastracks being used on a motorway. More obviously needs to be done to raise awareness of existing requirements but TGWU felt this research and VOSA's findings endorsed their long-running campaign for tractor MoT's to be introduced. The Chair agreed that this research will inevitably open up this debate but emphasised that the Government was not keen to introduce more legislation. BAGMA, NFU, NAAC and AEA all considered that the voluntary VHCS could deliver significant improvements by the industry itself, provided it was supported by adequate enforcement to reinforce the key 'good practice' messages.

ACTION – All Members to consider and make use of the BAGMA survey findings when published.

- AEA intended to consult with the NAAC and discuss the Government's response with DfT.

4.2 Review of Past and Current Research, Standards and Future Information Needs -

Andy Scarlett highlighted a number of other transport-related projects, including:

4.2.1 **Whole-body vibration (WBV)** – Agriculture and forestry were recognised as priority industries by HSE and specific guidance is needed for each industry. Andy's company, Scarlett Research Ltd, had been commissioned by HSE to continue the WBV work he previously carried out at the now closed Silsoe Research Institute. He had measured operator exposure on a range of key agricultural machines and operations and was finalising his report on the last type selected for examination (ie self-propelled forage harvesters). The Health and Safety Laboratory (HSL) were also undertaking research separately, working with the Forestry Commission to assess a range of forestry machines.

4.2.2 He found that WBV levels in all types of machine tested exceeded the Exposure Action Value at some point and cultivation operations exceeded the Exposure Limit Value. However, the time spent travelling vs in-work field operations was a significant factor to be taken into account. The results from the series of studies will be developed into 'best practice' guidance. This would

be incorporated in the proposed HSE Agriculture Information Sheet (AIS) on WBV. This had been held back by HSE until the full range of field machines had been assessed. The AIS will be aimed at managers and operators, highlighting the key factors such as the influence of mass; surface condition; speed; seat selection/maintenance and adjustment, and vehicle design. It is also intended that a standard methodology will be devised for assessing WBV emissions, as this is needed by manufacturers / importers and regulators.

ACTION – HSE to incorporate results and publish recommendations in the AIS on WBV and publish asap.

4.2.3 **Tractor/trailer braking systems** - New EC legislation is being introduced which will significantly increase the requirements for braking systems. The Transport Research Laboratory (TRL) are reviewing the European regulations which will take effect in UK in 2009/10. This will require provision of ‘fail to safety’ trailer brakes and the ability to apply trailer/trailed equipment parking brakes from the tractor seat (the most common cause of fatal accidents). Tractor/trailer braking systems will also be subject to Type Approval. However, these requirements will only apply to new equipment from the date of implementation. Existing equipment will be permitted to be used for a further 10 years. Currently, braking efficiency is specified at only 25% on new trailers and there is no requirement to check these in service. This was a major concern as trailers and trailed equipment are typically used for 15-20+ years, and particularly in view of the poor standards of maintenance, confirmed by the BAGMA study. Unsafe trailers could therefore remain in service for many years after the new legislation is introduced.

4.2.4 This is compounded by the fact that the industry is lobbying for an increase in permitted road speed to 50kph (30mph) from 40kph (25mph), as many tractors can now (and do) exceed the current limits. 40kph tractors have been available since the 90’s and have been approved by DVLA. However, travelling at this speed more than doubles the mass energy and manufacturers are becoming increasingly concerned as inadequate braking efficiency on trailers is becoming a regular cause of warranty claims on tractor brakes which have failed prematurely. Manufacturers are now working actively together to resolve braking system design and compatibility problems, but Group Members agreed that work is needed urgently to identify the extent of the problem and to examine design and performance of braking systems for tractors, trailers and other trailed appliances, as these cannot be considered in isolation.

4.2.5 HSE confirmed it could not support changes in legislation to permit increases in speed or weight without commensurate improvements in braking requirements. Awareness of farmers and manufacturers needs to be raised on the existing and forthcoming requirements and guidance is needed on alternative solutions to enable equipment to be operated safely on and off-road. AEA suggested DfT might be persuaded to permit a wider range of tractors to go faster (legally) if owners could demonstrate that efficient brakes are fitted and working, through voluntary testing.

4.2.6 The AEA feared that tractors might be subsumed under the Machinery Safety Directive, replacing the existing Type Approval arrangements. Jake considered this would be ‘a nightmare’ for the industry and consequently manufacturers and the AEA were lobbying against it.

4.2.7 Members agreed that further research is needed to provide relevant information for manufacturers, suppliers and operators. This proposal should be presented to DfT, with a view to possible joint sponsorship by industry and HSE. A standard methodology for in-service testing/assessment of trailer / trailed appliance braking system performance also needs to be devised. This would enable users to adopt good practice by specifying/purchasing appropriate equipment for the job and would provide ‘insurance’ against future developments. Industry reps also felt this could

also be used to develop a voluntary industry-supported scheme, rather than introduce compulsory MoT's for tractors.

ACTION - Scarlett Research Ltd (SRL) and AEA to prepare research proposal and submit to DfT and HSE for joint funding, supported by the industry through the AEA.

4.2.8 **Accidents on the Road** - Andy also reported on the long-running study of tractor-related accidents on the road, sponsored by DfT and being carried out by Richard Gard. Richard's study was based on extracting information from various official data sources as well as press cuttings of accidents. Richard had previously reported his findings at a series of workshops. The next event proposed for March 2007 had been postponed until later in the year. Jake stressed that the industry was looking for new information and conclusions to come out of this continuing research. The Chair suggested that it might be useful to combine this event with the next AIAC Transport Group meeting. This would provide an opportunity to update on all transport-related research, eg by SRL and TRL, perhaps as a joint DfT/HSE event.

ACTION – HSE to discuss with DfT and R Gard. [DONE – Joint HSE/DfT Workshop to be held on 15/11/07 at Stoneleigh Conference Centre, sponsored by DfT.]

4.2.9 The Chair recalled that at the last AIAC Transport Group Workshop it was reported that a final year student studying Agricultural Business Management at Reading University had approached HSE for information and contacts for research on his dissertation project, investigating road accidents involving agricultural vehicles. He intended to identify ways in which such accidents can be reduced and was looking into the effects of vehicle condition, driver experience and other road users knowledge of agricultural vehicles. He also intended to investigate the viability of introducing MOT tests for agricultural vehicles, but no further information was available. He had been advised to contact DfT and Richard Gard.

ACTION – HSE to discuss with R Gard.

4.2.10 **Roll-Over Protection** – A questions has recently been raised within the European Standards Committee over the integrity of the current tractor cab test criteria, following an accident in Spain which led to a catastrophic failure of a ROPS (roll-over protective structure) in a multiple overturn. Their concern is that as the weight of tractors and attached equipment has increased significantly over the past 15 years, this could be exceeding the currently specified safety margin. Tractor ROPS are tested in unladen condition. However, manufacturers are keen to avoid a fundamental redesign and HSE are unaware of any accident data in UK to support this.

ACTION – A Scarlett to attend the OECD meeting and report the industry's view to DfT.

4.2.11 **Cab air-filtration** – The Chair reported that discussions are still ongoing within ISO on the development of systems and test methods for tractors and self-propelled pesticide sprayers, etc. HSE Ag Sector staff had contributed significantly to the discussions. It was proposed this would be developed in 2 phases - initially to develop a standard to adequately remove/control exposure to particulates, followed by the more difficult issue of pesticides/chemicals. This is to be dealt with at the international standards level. Members felt strongly that HSE must remain involved to ensure a 'reasonably practicable' approach is adopted.

ACTION – HSE input needed on this International standards work

4.2.12 **Visibility Standards for Telehandlers** – AEA had raised concerns about HSE's proposals for a new standard which had arisen following a fatal accident to a worker standing in a hole in the ground on a construction site. HSE had held further discussions with loader manufacturers (including AEA) and a further meeting is planned. The AEA had questioned the practicability of introducing the proposed specifications and requested statistical evidence to justify any changes in

current test standards. Jake felt this issue merited discussion at AIAC and had attempted to raise it previously. Alan pointed out that the AIAC's role was now more 'strategic', and assured him that the AIAC Chair was aware of the AEA's concerns.

***ACTION – Andy Scarlett's presentation to be posted on the AIAC Transport Group website, for members to use as appropriate (nb provided the source is acknowledged).
[DONE]***

5. REVIEW OF MEMBERS ACTIVITIES

Delegates gave an update on progress of relevant activities not covered elsewhere on the agenda. Topics raised included:

5.1 AEA - ATV SAFETY (Intro to lunchtime demo):

5.1.1 Jake described the AEA's long-running campaign to improve ATV operator awareness and training and introduced the new ATVEA training DVD (shown over lunch). AEA intended that this should be supplied with all new ATVs as part of an industry-wide initiative to promote driver training, encourage riders to wear helmets and to discourage carrying passengers. This initiative was being supported by the AEA as their ATV manufacturer / importer members considered that HSE's "Riding for a Fall" video was now outdated. The new DVD is also suitable for a wider audience, including users of utility vehicles and for sport and leisure riding, as it covered the different design/safety features on these machines.

5.1.2 The AEA endorsed the European ATV Safety Institute's rider training system, originally developed in the USA, as it is a more comprehensive training package than Lantra Awards'. This had been demonstrated at Stoneleigh on 16 March 2006 and he was disappointed that the DfT, DVLA and Lantra did not attend. AEA had approached Lantra Awards who are responsible for agriculture and land-based industry training courses. Although he felt Lantra Awards had 'come a long way', he was disappointed they would not provide the names of their registered trainers to enable AEA to contact them directly to inform them of this new training scheme and supporting material. The Chair also referred to the British Off-Road Driving Association (BORDA) scheme. BORDA had approached HSE, to review the content and scope of their training package, which includes operation of ATVs and is being promoted by BORDA amongst the 'leisure/corporate entertainment/motorsports' industry. Jake advised that the AEA/ATV manufacturers had also looked at this scheme but did not consider it was suitable or as effective as the EASI Scheme.

5.1.3 Jake also reiterated the AEA's concern that the DVLA had now licensed some 14,000 'ATVs', which the manufacturers considered are unsuitable for use on the road. The AEA had also approached the CITB as some machines were being used illegally by construction companies on the road, eg to escort convoys in road works. This is a difficult issue to tackle because County Councils approve construction plans and the Highways Agency oversee road works. AEA concluded that the DfT needs to take the lead and AEA were making representations to them.

The increasing use of DVD's as a training medium was also discussed. Video's are now outdated. The Chair reported that HSE is in the process of transferring all of its agricultural videos on to one DVD for sale. This was likely to cost £25/copy. Nigel Davy confirmed that large companies increasingly use DVD's for training and he was also aware of an effective computer-based system that included a Q&A session and provided a printed Certificate upon satisfactory completion. He suggested the ATV DVD could be suitable for induction of contract labour.

ACTION – HSE/Members to consider/publicise the EASI ATV Rider training scheme

5.2 NFU Mutual

5.2.1 In David Leavesley's absence, Alan explained that discussions had continued with NFU Mutual on sharing information, publicity and sponsorship (of SHADs). The sample information on accident claims provided by David at the previous meeting has still to be cleared for disclosure/use in publicity. It was not known if there had been any further action on the business guides being produced by 'Associa' (the former 'NFU Services').

ACTION – HSE to follow-up with NFU-Mutual

5.3 Agriculture Industries Confederation (AIC)

5.3.1 The Chair reported that Ken Hardgrave had provided the Ag Sector with some examples of accidents reported within his company. The AIC had also responded to HSE's consultation on 'Management Standards' for Transport. Gary Rudd confirmed that they would continue to liaise with relevant HSE Sectors to ensure commonality and consistency of advice and enforcement, between regulators (including LAs) across the country and encourage HSE to produce guidance to solve problems and inconsistencies at some storage plants and mills, eg on supervision of loading and sheeting of vehicles.

6. REVIEW/FEEDBACK (incl outstanding actions)

6.1 Alan explained this session was intended to review outstanding actions from the previous Workshops, to review the 'deliverables', timescales and evaluation methods previously identified and to confirm commitments and issues to report to AIAC. Members confirmed that the main value of the Group is to exchange information with a view to raising awareness through member's networks and to help HSE establish its priorities for research and publicity/communications messages.

ACTION – HSE to incorporate any new potential outputs/outcomes, timescales, resource needs and communications in a revised Project Plan.

6.2 Topics listed in previous minutes not discussed during the meeting included:

6.2.1 **Trailer Overloading** – Tony Mitchell was unable to obtain any weighbridge data from VOSA, for use by members.

6.2.2 **Victims/Case Studies - All members** reminded of request to identify and provide names of individuals willing to be interviewed to give a personal 'victim' statement.

6.2.3 **Licensing of ATV's & Sales of Unsuitable Equipment on e-Bay** - AEA still in discussion with DfT over the classification of ATV's. HSE met DTI to discuss sales of machines through e-Bay and liaised with HM Revenue & Customs + a local Trading Standards Department, to follow up one particular case.

6.2.4 **Road Safety article for Motorcyclists** – Ian Beeby (TGWU) to place an article in 'Bike' magazine highlighting the prevalence of accidents involving motorcycles overtaking tractors turning right.

6.2.5 **HSE Food Chain Project** – All members reminded about this initiative aimed to engage businesses in the food processing and supply chain who are capable of influencing farmers, and the request to send any information to Bruno Porter (HSE Ag & Food Sector), to help produce and promote the business case for h&s. In particular, examples of actual costs/benefits of avoiding breakdowns and consequent delays in production, processing and delivery are needed. None known to be forthcoming.

6.2.6 **Contractors** – HSE to discuss the scope for 'contractor SHADs' with NAAC and to

develop a 'Partnership Agreement' similar to that signed recently between the AEA and HSE.

7. FUTURE OF THE GROUP - DATE OF NEXT MEETING

7.1 It was agreed that the AIAC Transport Group's Workshops provide a useful forum enabling members to actively share information and to coordinate and promote working together, eg in joint publicity campaigns. They also help to maintain impetus.

7.2 The Project Group Plan and summary of 'deliverables' and agreed actions to be updated to reflect the discussions at the 3rd Workshop.

ACTION – HSE [DONE – See attached Appendix]

7.3 The next Workshop was proposed to be run jointly with DfT to cover road-related research as well as off-road issues, late in 2007.

ACTION - Date and venue to be confirmed.

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SUMMARY OF AIAC TRANSPORT GROUP DELIVERABLES / AGREED ACTIONS
(Following 3rd Workshop, Dec 2006)

Communications

General Information (incl accident statistics, cost of accidents, publicity, etc)

- **Guidance** - Transport related issues should be covered in guidance relating to new legislation e.g. noise, work at height, etc, as far as possible/relevant.

ACTION – HSE, etc

- **Sharing information** - Information will be exchanged between stakeholders as this is vital to identify and promote the key messages through guidance and publicity, eg articles in journals and newsletters, HSE's e-Bulletin, etc. HSE provide regular updates on fatal and injury accidents for members to use in publicity (available on AIAC Transport Group webpage).

ACTION – All members to highlight significant cases, key issues and trends in their publicity, guidance, etc.

- **'Business Case' for good practice** - Information/case study examples needed to emphasise the cost of accidents (including the cost of delays in production/processing/delivery from non-injury accidents). Insurers and the industry are best placed to provide this information and to help develop/promote the 'business case' for adopting good practice and training.

ACTION – All Members

- **Safety and Health Awareness Days (SHADs)** – Evaluation indicates practical demonstrations at SHADs have a positive impact on farmers and in forestry. Expansion of concept to include larger employers and employees, contractors and others, + sponsorship should be considered

ACTION – HSE + member organisations.

- **Incentives and higher penalties** - to be encouraged, eg Insurers recognising training and certificates of competence and reflecting this in premiums would provide an incentive. [*Chairs Note - HSE are working with Insurers on this and it is hoped to organise a joint seminar for the Finance and Insurance industry, early in 2007.*]

ACTION – HSE to organise Seminar and discuss with Lantra.

ACTION - NFU Mutual support this approach and are prepared to present their information on cost of accident claims at the seminar. David Leavesley to clear disclosure of information presented at Workshop and make a summary available to all members.

- **Avoiding Contact with Overhead Power Lines** – The **Energy Network Association (ENA)** are seeking to work with stakeholders to revise their guidance for farmers, forestry and arboriculture, and contractors. Distribution companies have also produced guidance (eg Western Power's DVD). HSE also revising GS6 and AFAG guidance is being reviewed. Machinery dealers and other suppliers should be made aware of relevant leaflets and copies could be provided, for distribution to their clients. This initiative could also be promoted through HSE's Agriculture e-Bulletin and Arboriculture News, both produced and issued by the Ag Sector. Issue to be highlighted in SHAD scenarios. Accident data to be extracted from DTI database and summarized for members to publicise.

ACTION – ENA, HSE, AEA, BAGMA, NFU, etc.

Safe Vehicles

- **Improving Maintenance** - The findings of the BAGMA study confirm that more effort is needed to encourage compliance with the most basic requirement of maintaining brakes to ensure

that they actually work.

ACTION – All Members.

- **Tractor Testing/ ‘MoT’s’** - The industry prefers to promote and use the voluntary BAGMA Health Check Scheme. There would also be practical and legal difficulties introducing a compulsory ‘MoT’, as there is no (political) pressure to impose new legislation on this, and suitable facilities for testing tractor/trailer combinations are not available.

ACTION – All members to promote the VHCS and maintain a watching brief. Further discussions needed with DfT following publication of BAGMA research report.

- **Pre-start checks** – Automatic built-in pre-start checks could be effective, similar to those used on HGV’s.

ACTION – AEA and HSE to discuss, eg through Standards committees.

- **Improving Vehicle Lighting** - Intensity and position of lights (eg on many tractors and trailers) should be improved.

ACTION – AEA/HSE. However, Type Approval to international standards and the fact that most tractors are now manufactured outside UK likely to prevent improvements being introduced in the medium term.

- **Improving Visibility of vehicles** – In lieu of improving lighting standards, brighter ‘safety’ colours could be effective in alerting bystanders and other road users to approaching tractors, projections etc.

ACTION – AEA/HSE, although it is accepted that this is again prevented by standardisation procedures and corporate colours schemes for marketing and brand identification.

- **Improving Braking systems** - Current specifications for braking systems on agricultural tractors (based on international standards) are grossly inadequate for the weights being carried (on the road). New European legislation is being introduced in 2009/10. A review of the implications of these new requirements is needed to inform the industry and help them to prepare and adapt their equipment.

ACTION – DfT, HSE, AEA

- **Brake testing** - A simple, easily repeatable test protocol is needed, including for tractor/trailer combinations. Research is needed to establish a practicable standard method to measure braking effectiveness, in the absence of suitable and sufficient ‘rolling-road’/testing facilities.

ACTION – HSE to attempt to progress SRL’s proposal for braking research urgently, in consultation/jointly with DfT.

- **Regulatory Guidance** – The expansion of Type Approval to a wider range of vehicles, including self-propelled and trailed appliances would be significant and needs publicity. There is ongoing debate over published advice and interpretation of the Construction and Use Regs and application of licensing requirements to farm vehicles, eg the NFU’s Transport Guide compared with the AEA’s ‘flowchart’.

- **Trailer weights** – In particular, to overcome the current confusion over maximum vehicle/gross train weights, a simple summary of the (complex) legal requirements should be produced and made widely available, including to feed mills/grain storage plants, etc.

ACTION – DfT & HSE, + NFU, AEA, AIC, et al to inform members. [AEA’s guidance is available on their website, and Dr Scarlett’s summary is on HSE’s AIAC Transport Group webpage. AEA and HSE to continue discussions with DfT with a view to producing ‘definitive’ guidance.]

- **Safe design of vehicles** - eg improved visibility, provision of driver aids, reduction in operator exposure to noise and vibration, etc. Raise awareness of the new Regulations and promote the outcome of the recent Silsoe/SRL research on WBV.

ACTION – All Members. HSE to publish Information Sheet asap

- **Inspection/enforcement activity** – Members called for a higher enforcement profile by HSE to reinforce guidance and standards, especially targeting the non-compliant. It was also felt HSE should do more to promote designers/manufacturers/importers awareness of their duties under s6 HSWA and European Directives/SMSR.

***ACTION** – HSE (and other Regulators - VOSA, etc]*

- **Overhead Power Lines - Proximity sensors on mobile machinery** – Reliability and effectiveness of new systems should be reviewed (eg work in Australia), as their potential effectiveness is increasing with use of GPS/Satnav and it might soon be feasible to instal automatic warnings of the location of OHL's and prevent hazardous machine operations.

***ACTION** – HSE, AEA, ENA and the industry to consider options.*

Safe Driver

- **Promoting Vehicle Maintenance - Advice to operators** – NFU's suggestion to develop a decal as an aide memoire and reminder for operators to perform daily checks should be explored. [Nb. However, this is subject to Directives and International Standards. Siting is important - alongside or on the door in the footwell would be preferable, being at eye level as the driver enters the cab and not obstructing vision. Other suggestions included incorporating this info in the tax disc holder and key fobs.

***ACTIONS** – AEA (and others) to inform/advise members. Sponsorship for key job to be explored.*

- **Road Safety/driver training issues** – Many (non-farming) companies place greater emphasis on driver training schemes, such as RoSPA's. This is becoming more important with the increase in tractor speeds and train weights. Some 'chipped' tractors are now capable of road-speeds up to 60mph! [AEA/manufacturers emphasise this invalidates warranties and compliance with PUWER.]

- **Public awareness** – Public should be alerted to anticipate slow moving farm vehicles and potential movements, particularly turning right off highways. It is often difficult for following drivers to distinguish between HGVs and tractor-drawn trailers. **Ian Beeby** is an Advanced Motorcycle instructor and offered to place an article in 'Bike' magazine on the prevalence of motorcycle accidents involving farm vehicles on the road.

***ACTION** – All Members, through their publicity networks, articles, etc.*

- **ATV Safety** – This is a major concern, given the steady occurrence of accidents, including deaths, also involving children and young persons. Promotion of training is vital together with wearing if helmets. [Examples include the AEA's promotion of the EASI Training Scheme and their continuing campaign to highlight these issues in the media and at shows, etc; a possible joint initiative between NFU / NFU Mutual to promote provision and wearing helmets and run a 'SAD' day for ATV users - possibly in conjunction with a supplier?]

***ACTION** – All Members – to use/raise awareness of available training schemes and guidance.*

- **Worker safety** – Article(s) covering issues raised to be published in TGWU's Landworker.

***ACTION** – Ian Beeby.*

Safe sites

- **Site Management** – In addition to the usual precautions of site rules, segregation of pedestrians from vehicles, provision of walkways, warnings, mirrors etc, HSE is this year focussing on the interaction between transport issues and the Working at Height and Slips and Trips Programmes, eg delivery vehicles/drivers using unsuitable or unsafe access equipment available on site. This needs to be highlighted and publicised in guidance.

***ACTION** – All Members*

- **Road Safety – Turning accidents** – Insurers highlight turning right as the main cause of injury/losses. Providing turning points and slip lanes at approaches to known right turn blackspots

was one solution, to be promoted in guidance and articles. Drivers should be encouraged to use verges etc as ‘havens’ and to display effective warning signs.

***ACTION** – All Members, NFU Mutual and other insurers to share any research findings.*

- **Work activities on the Road** - Linked to the above is roadside working and the hazard of debris on the road (e.g. mud, hedge cuttings, etc).

Evaluation

The Group needs to identify methods and measures of ‘success’ (or otherwise!). Tools and mechanisms currently available include:

- **Baseline data** – BAGMA’s research project involving their dealers to collect baseline data on the condition of farm vehicles in use would help to compensate for the reduction in information being collected due to the reduction in on-farm inspections by HSE. This will enable evaluation and targeting of interventions.

***ACTION** – BAGMA + HSE/DfTr: BAGMA to prepare summary of data on completion of project (end of January 2007), for consideration by HSE (and DfTr). All members to publicise findings.*

- **Level of compliance** – of vehicles and operators (although these will be difficult to measure without sound base-lines).
- **Hits on websites, trends in requests for guidance, publications, etc**

***ACTION** – All Members to assess.*

- **Level of Training** – for example, proportion of dealer staff trained by BAGMA, and number of operators receiving training on ‘installation’ (supply). Lantra SSC are carrying out research on the quality of training and assessing ‘transfer of knowledge’ within the industry.
- **Adoption/understanding of training** – eg based on use of proposed ‘Best Practice’ guidance on WBV and impact of training on operators. [*Proposal by Scarlett Research Ltd.*]
- **Bomel’s ‘Barometer of Culture Change’** tool - developed and tested for use by researchers/HSE staff to measure ‘influence’ of interventions.

***ACTION** – Members invited to submit any other ideas/methods of evaluating the impact of the Group.*