



National Highways Sector Schemes for Quality Management in Highway Works

17

For vehicle recovery at Highway Construction sites

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the Vehicle Recovery (SSACVR)**

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Appendix C revised to provide transitional arrangements for introduction of training and assessment of technicians

Revisions

It is the committee's policy that the issue of any revision to this document shall be an issue of the full document rather than individual pages.

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COMPOSITION OF THE SECTOR SCHEME ADVISORY COMMITTEE, EXCLUSION OF LIABILITY AND SELECTION OF CERTIFICATION/INSPECTION BODY

COMPOSITION OF SECTOR SCHEME ADVISORY COMMITTEE

Association of Chief Police Officers
Association of Vehicle Recovery Operators Limited (AVRO)
Automotive Skills Ltd
Highways Agency
The Institute of the Motor Industry (IMI)
The Institute of Vehicle Recovery (IVR)
London Association of Recovery Operators (LARO)
Road Haulage Association (RHA)
Road Rescue Recovery Association (RRRA)
Survive

Certification , Inspection and Accreditation Bodies

Consortium of Automotive Registration Services Ltd
Eagle Certification Ltd (representing Association of British Certification Bodies)
International Certification Services Ltd
Recovery industry Engineering Standards Ltd
ICS Registrars (representing Federation of Certification Bodies)

EXCLUSION OF LIABILITY

The SSACVR

- 1 has and accepts no liability whatsoever for any failure of any system or systems assessed under this Sector Scheme Document or for the quality, fitness for purpose, or safety of any product or service which is the subject of such assessment,
- 2 does not provide any representation or warranty as to any aspect of any such system, product or service, and
- 3 hereby expressly excludes all and any liability or responsibility (however alleged to arise) for or in connection with the provision of any service or product or any use of any product, all and any such liability or responsibility attaching exclusively to the producer (or user as the case may be) thereof.

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SELECTION OF CERTIFICATION AND INSPECTION BODIES

It is important to note that due to the specific requirements for assessor competence required by this Sector Scheme a technical expert may be appointed by the Sector Scheme Committee to assist the United Kingdom Accreditation Service (UKAS) in the assessment of Certification and Inspection Bodies as described in Appendix G.

Prospective companies seeking registration under this scheme should ensure that they engage a Body specifically accredited by UKAS to assess against the requirements of this SSD. Specifiers, consultants, engineers etc. that require confirmation of compliance with the Contract Specification in respect of the supply of products/materials should confirm the current status of the quality management system certificate issuer and that specific reference is made to this Sector Scheme.

UKAS has advised that Inspection Bodies and Certification Bodies have been accredited to carry out audit checks against the requirements of Publicly Available Specification 43 (PAS 43). It should be noted that Inspection Bodies are normally accredited to ISO/IEC 17020 (BS EN 45004) and as such are restricted to issuing certificates of compliance for inspection of vehicles following successful inspection/examination of recovery vehicles including associated equipment and processes, facilities and premises of recovery breakdown operators; however their accreditation does not allow them to issue system certificates meeting the requirements of BS EN 45012. Similarly Certification Bodies that are only accredited to BS EN 45012 for quality management will normally not have the in-house expertise or the accreditation to carry out comprehensive inspection of plant and equipment but they can accept work carried out by Inspection Bodies without the need for further inspection/examination of recovery vehicles and associated equipment. This scheme requires that both elements are comprehensively assessed and audited

IMPLEMENTATION

The scheme will be implemented twelve months after its publication of its availability by UKAS on its web site (September 2005). In addition, the scheme will be included in Appendix A of the Specification for Highway Works as a mandatory requirement for suppliers contracted to the Highways Agency.

This delay in implementation should allow companies and certification/inspection bodies sufficient time to comply with the interpretation given in this document, it is also proposed that a transitional period of twelve months from the date of availability (by UKAS) will be provided to companies who have obtained registration to PAS 43:2002 for vehicle recovery operations to allow assessment to this document to be covered by their normal assessment regime.

INTRODUCTION

The Sector Scheme Advisory Committee for Vehicle Recovery (SSACVR) was set up in June 2003 under the Chairmanship of the Highways Agency, to establish a National Highways Sector Scheme (NHSS) for vehicle recovery and removal at construction sites for Highway Authorities. The scheme would be used by the United Kingdom Accreditation Service (UKAS) as part of its assessment for certification and inspection bodies wishing to be accredited in the field of vehicle recovery and removal and by inspection and certification bodies for assessing vehicle recovery and removal contractors. It is proposed that this committee would act in an advisory capacity to UKAS on vehicle recovery and removal issues.

This Sector Scheme Document (SSD) relates to the inspection and system requirements for providing contracted vehicle recovery and removal operations and services at highway construction sites. Highway construction sites may also include highway maintenance schemes where the highway authority considers this is appropriate. It is intended for use on roads operated by the Highways Agency and other highway authorities and therefore can include any type of highway.

In using this Sector Scheme users shall use best practice of specifying any other relevant National Highway Sector Scheme as appropriate to the nature of the work being undertaken. Furthermore where there is a Sector Scheme in place it must be used.

It is acknowledged that a number of accredited certification and inspection bodies have achieved accreditation for PAS 43:2002. For certification bodies this accreditation has been obtained against ISO Guide 62/EN 45012 (quality management systems) and for inspection bodies accreditation has been achieved against ISO 17020/EN45004 (inspection). This document expands on the recommendations and requirements contained in PAS 43 and provides an interpretation of BS EN ISO 9001 and PAS 43 for the technical competencies required to provide a national conformity system and related certification for highway authorities. The document has been prepared in conjunction with these bodies, the relevant trade associations and highway authorities so that a national benchmark can be provided, which will meet the specific requirements of highway authorities on highway construction sites.

The SSD is a live document with the Committee meeting at least once a year to develop it as appropriate. Those using the document should always ensure that they have the current version of the document by contacting any of the Certification or Inspection Bodies listed in Appendix F, or UKAS at 21 - 43 High Street, Feltham, Middlesex, TW13 4UN. (The current version of the scheme is also freely downloadable from the UKAS web-site, www.ukas.com)

A list of registered Organizations shall be maintained by the Secretary of the Committee and copies may be obtained by writing to the Secretary (C/O of UKAS) or from Lantra Awards who also maintain a list of organizations registered to this scheme.

Any observations or complaints relating to this SSD should be handled in accordance with the procedures given in Appendices J1 or J2 as appropriate.

Unless otherwise defined in a contract this scheme shall be deemed to include removal and recovery of vehicles, which have either broken down and/or been disabled in relevant minor road traffic accidents at construction sites

INTERPRETATION OF BS EN ISO 9001:2000/PAS 43:2002

1. SCOPE

This SSD describes the certification system requirements to be established by Organizations providing contracted vehicle removal and recovery operations at highway construction sites where a free recovery service is provided during the currency of the construction work. Where applicable this includes highway maintenance and construction sites on motorways, high-speed dual carriageways and other highways. It is intended for use on roads operated by the Highways Agency and where required by other highway authorities.

The SSD shall be referenced in the Certificate of Registration issued by appropriate Certification and Inspection Bodies accredited by the United Kingdom Accreditation Service (UKAS) or equivalent accreditation body. (See Appendix K)

2. NORMATIVE REFERENCE

The following normative documents contain provisions which constitute provisions of BS EN ISO 9001:2000 Quality Management Systems – Requirements:

- BS EN ISO 9000:2000 Quality Management Systems – Fundamentals and Vocabulary
- BS EN ISO 9004:2000 Quality Management Systems – Guidelines for Performance Improvements.
- PAS 43:2002 – Safe working of vehicle breakdown and recovery operators; including amendment No 1

3. TERMS AND DEFINITIONS

For the purpose of this Sector Scheme Document the following definitions shall apply.

Accredited Vehicle Recovery Operative	an individual who is already a Certificated Roadside Operative and has successfully completed the ancillary equipment module relating to light vehicles, motorcycles or heavy vehicles (see appendix 3 to the accreditation scheme).
Accredited Vehicle Recovery Technician	an individual who has successfully completed the further groups of modules, based upon specialism (e.g. heavy vehicle) and the type of equipment being used. (see appendix 3 to the accreditation scheme).
Client:	The body for which the work is being carried out eg Highway Authority.
Certificate of Registration:	A certificate issued by a UKAS accredited Certification or Inspection Body certifying that the holder operates a Certification System complying with this SSD. The Certificate will state the categories of work that the holder is competent to supply. (See Appendix K)

Certificated Roadside Operative	an individual who has successfully completed an induction programme (based upon modules 1-3) and meets the assessment requirements specified in paragraph 3.3 of the accreditation scheme.
Contract Specification:	<ul style="list-style-type: none"> i) Manual of Contract Documents for Highway Works: Volume 1: The Specification for Highway Works (Department for Transport) or as specifically required in the contract documents. ii) Contract Specific Appendices iii) The Contract Drawings
Customer:	The body engaging the Organization for the purpose of the work described in this SSD.
High Speed Dual Carriageway	A dual carriageway which in normal circumstances is subject to speed restrictions of 50 mph or greater
Organization	The organization responsible for the vehicle recovery operations at highway construction sites.
Quality Plan	The document setting out the specific quality practices, resources and sequence of activities relevant to the project (See Appendix A).
Quality Management System	The Organization's structure, responsibilities, procedures, processes and resources for implementing Quality Management.
Organization's Manager	The person named in the Organization's Quality Plan as having managerial responsibility for the vehicle recovery operations.
Recovery	Any operation required to facilitate Vehicle Removal, and / or alternative means of transporting the vehicle where Vehicle Removal is not practical. Ie any activity that falls outside the scope of a removal.
Removal	For motorways, dual carriageways, clearways and A-class roads, the vehicle to be removed must be on all wheels and free to roll in an upright position between the kerb stones or barriers, be completely on the road surface and be facing with the flow of traffic and be in such a position that loading by the removal vehicle is unhindered. The casualty vehicle must be capable of being removed by suspend towing by an underlift utilising wheel lifting frames or a light vehicle transporter. In the case of LGV's, suspend tow only.
"shall"	"used to indicate a requirement strictly to be followed in order to conform to the standard and from which no deviation is permitted. (See ISO Directives Part 3:1997, Annex E)" (reference "guidance on terminology used in ISO 9001:2000 and ISO 9004:2000".)

4. SYSTEM REQUIREMENTS

Paragraph numbers in sections 4 to 8 below refer to the relevant paragraph numbers in BS EN ISO 9001 : 2000. Where no reference is included in this Sector Scheme Document the requirements are as stated in BS EN ISO 9001 : 2000 without further qualification.

4 Quality Management System

4.1 General Requirements

The organization shall notify Lantra Awards (Lantra House, NAC, Kenilworth, CV8 2LG) and the Secretary to VRSSC of their registration to this scheme immediately following confirmation from the inspection and certification body and thereafter annually. In addition the organization shall provide details of a focal point for the organization.

4.2 Documentation Requirements

4.2.1 General

Quality Plans shall be required for all contracts. When specified in the contract documents or requested, the Organization shall submit a Quality Plan or alternative document as defined in the Contract Specification for acceptance or approval by the Client, as appropriate, prior to commencement of work. (See Clause 10 of PAS 43:2002)

The relevant quality plan and standard operating procedures shall be available on site and shall be read and signed by each operative.

4.2.2 Quality Manual

No specific interpretation.

4.2.3 Control of Documents

As part of the Organization's procedures for document control, the following contract specific documents are typically required to be controlled:

Certification for vehicles used for the contract. (See Clause 120.32 of the SHW and Clause 5.1 of PAS 43:2002). (NOTE: All recovery vehicles shall have either a current goods vehicle test certificate or MOT certificate or other certificate of roadworthiness issued by a VOSA approved testing station, which is to be renewed annually.)

Certification for lifting and towing equipment. (See Clauses 6.1 and 6.3 of PAS 43:2002) (NOTE: All lifting and towing equipment shall have the relevant LOLER or PUWER certification)

4.2.4 Control of Records

In addition to the Organization's own quality records, the following contract specific records shall typically be kept:

1. Logging of recovery operations.
2. Daily record sheets of recovery/removal operations
3. Vehicle maintenance and servicing records. (See Clause 5.1 of PAS 43:2002)
4. Vehicle inventory of tools and equipment (See Clause 6.1 and Annex B of PAS 43:2002 and Clause 120 of the Specification for Highway Works)
5. Copies of relevant records shall be kept on site and/or with the vehicle as appropriate.

Records shall be kept for a minimum of 6 years or until the end of the maintenance, defects or guarantee period whichever is greater. Record disposition after this period shall be defined in the Quality Plan.

5 Management Responsibility

5.1 Management Commitment

No specific interpretation

5.2 Customer Focus

Processes for determining customer requirements shall consider the interests of the Client and the product end users, i.e. the general public/travelling public and shall be mindful of the Client's interaction with the end users. This will include processes to minimise disruption to traffic. (Reference should also be made to Annex D of PAS 43:2002)

The organization's quality policy statement shall include a statement of commitment to this Sector Scheme.

5.3 Quality Policy

No specific interpretation but see 5.2 above

5.4 Planning

No specific interpretation

5.5 Responsibility, Authority and Communication

No specific interpretation

5.6 Management Review

5.6.1 General

The Organization shall review the quality management system at least once a year to ensure its continuing suitability and effectiveness to conform to this Sector Scheme.

5.6.2 Review Input

No specific interpretation.

5.6.3 Review Output

No specific interpretation.

6 Resource Management

6.1 Provision of Resources

No specific interpretation.

6.2 Human Resources

(See Clause 10 and Appendix C of PAS 43:2002)

6.2.1 General

The training and assessment of operatives and technicians required by this Scheme is aimed primarily at technical competence for vehicle removal and recovery. It is intended to provide awareness to carry out work in a safe manner however it remains the responsibility of the Organization to determine and implement safe systems of work.

6.2.2 Competence, Awareness and Training

(i) Induction Training

The Organization shall undertake induction training for new employees, details of this are given in Appendix C. (See also section 9 and Annex C of PAS 43:2002)

(ii) Training

Accredited Vehicle Recovery Operatives and Technicians and Certificated Roadside Operatives shall hold a registration card, which certifies successful completion of a recognised course on breakdown recovery applicable to the type of vehicle or vehicles that they operate.

(iii) Records of Training and Vehicle Recovery Practical Experience

The Organization shall create and maintain records of training and practical Vehicle Recovery experience for each Operative and Technician.

The Organization shall create and maintain a register of employees who hold Vehicle Recovery Operative and Technician qualifications. (See appendix D)

(iv) Training in Vehicle Recovery

The training scheme administrator (see Appendix C) accredits and validates training courses, which are offered at various training centres throughout the country. See Appendix C for details.

(v) Vehicle Recovery Registration Cards

Upon the successful completion of each module, a Vehicle Recovery Registration Card is issued by the scheme administrator to the Operative or Technician. The card is valid for a period of 5 years (including a 6 month renewal period).

Note – Cards should be checked every 12 months as per driving licence

The registration card is issued following successful completion of a course on breakdown recovery applicable to the type of vehicle or vehicles that they operate.

The Vehicle Recovery Registration Card defines the type of recovery for which the holder has been trained. It shall not be deemed to be valid for any type of vehicle recovery, which

is not defined.

The issue of a Vehicle Recovery Registration Card shall be recorded by the Organization on the holder's record of vehicle recovery Practical Experience.

The Vehicle Recovery card is to be available for inspection on site at all times. The card will include an identification photograph and the name of the Organization. (See Clause 9.1 of PAS 43:2002)

NOTE: The card may be linked to the successful completion of the training and assessment of the vehicle recovery operative or technician

(vi) **Renewal of Vehicle Recovery Registration Cards**

Renewal of a Vehicle Recovery Registration Card will be subject to the holder of the card attending and successfully completing an approved refresher course within a period of 6 months prior to its expiry date. Original information will be shown on the re-issued Vehicle Recovery Registration Card.

Registered persons failing to re-qualify within the designated period will be required to attend and successfully complete the appropriate full course(s) before a new Vehicle Recovery Registration Card is issued.

The issue of a renewed Vehicle Recovery Registration Card shall be recorded by the Organization on the individual Record of Vehicle Recovery Practical Experience.

(vii) **Checks on Driving Licences**

The Organization shall carry out annual checks of Vehicle Recovery Operative's and Technician's driving licences; the quality management systems shall include requirements and time periods for this. These records shall be made available to the Customer/Client if so requested. (See Clause 9.2 of PAS 43:2002)

Note – These checks should include matching licence to the vehicle being driven and max loading weights. The checks on the licence must cover recovery and casualty

6.3 Infrastructure

No specific interpretation (See Clauses 5.1, 6.1 and 6.3 of PAS 43:2002)

6.4 Work Environment

No specific interpretation (See Clauses 5.1, 6.1, 6.3 and 8.1 of PAS 43:2002)

7 Planning and Product Realization

7.1 Planning of Product Realization

The Quality Plan (QP) shall as a minimum address the topics listed in Appendix A of this schedule and the requirements contained in the Specification for Highway Works and associated contract documents.

The QP may be a largely standard document as indicated in Appendix A of this schedule supplemented by contract specific information.

7.2 Customer Related Processes

7.2.1 Determination of Requirements Related to the Product

The Organization's site staff shall attend meeting(s) with the Client/Customer/Police if so requested. (See Clause 4.3 of PAS 43:2002)

7.2.2 Review of Requirements Relating to the Product

- (i) The processes for review and determination of requirements shall require the Organization to verify with the Customer that the order placed meets the technical requirements included in the Client's Contract Specification. (See Clause 4.3 of PAS 43:2002)
- (iii) Matters of a significant nature, which arise during the determination and review of requirements shall be considered during the management review and incorporated as necessary into the quality management system.

7.2.3 Customer Communication

No specific interpretation.

7.3 Design and Development

There is no requirement for design and development with vehicle recovery and removal operations, therefore this section is not included in the assessment.

Note: Where design and development or adaptation of vehicles is required this shall be undertaken in accordance with the quality plan. The QP shall identify personnel/staff involved together with their qualification/experience to undertake the relevant modifications. The vehicles shall be subject to revalidation by the appropriate authorities.

7.4 Purchasing

No specific interpretation.

7.5 Production and Service Provision

(See clause 10 of PAS 43:2002)

7.5.1 Control of Production and Service Provision

The Organization's procedures shall include systems for the following aspects:

- Recovery vehicle inspection and maintenance. (See sections 5 and 6 of PAS 43:2002)
- Testing and inspection of tools and equipment, and ensuring that tools and equipment are maintained in good condition. (See sections 5 and 6 of PAS 43:2002)
- Maintenance of winches and ropes. (See clause 6.3 of PAS 43:2002)

7.5.2 Validation of Processes for Production and Service Provision

No specific interpretation.

7.5.4 Customer Property
No specific interpretation.

7.5.5 Preservation of Product
No specific interpretation.

7.6 Control of Monitoring and Measuring Devices

No specific interpretation (See Appendix E)

8 Measurement, Analysis and Improvement

8.1 General

No specific interpretation

8.2 Monitoring and Measurement

8.2.1 Customer Satisfaction
No specific interpretation.

8.2.2 Internal Audits

Internal audits of the quality management system against this SSD shall include at least two visits a year to specific works sites to check recovery operations. (Where the organization does not have contracts which provide continuous working throughout a full year, visits shall be conducted on a pro-rata basis, but at least one visit per contract must be made) Internal auditors shall have a working knowledge of vehicle recovery for highway construction sites.

8.2.3 Monitoring and Measurement of Processes
No specific interpretation.

8.2.4 Monitoring and Measurement of Product
No specific interpretation.

8.3 Control of Non-conforming Product

No specific interpretation

8.4 Analysis of Data

No specific interpretation

8.5 Improvement

No specific interpretation.

APPENDIX A: REQUIREMENTS FOR QUALITY PLANS

The Quality Plan shall include the following items as a minimum.

1.0 General Requirements

- 1.1 Definition of the product to be provided.
- 1.2 The structure of the Organization describing the line of command and responsibilities and stating the names of the Organization's Manager responsible for the contracted work.
- 1.3 Identification of the relevant parts of the Organization's quality manual relevant to the product or service being provided.
- 1.4 The control of personnel selection including special requirements for skilled personnel eg training of site staff and character checking/vetting processes.
- 1.5 The control of recovery vehicles and other equipment.
- 1.6 The Customer's nominated Quality Manager, project manager and/or other representatives through whom communication is to be made throughout the contract.
- 1.7 Procedures for dealing with members of the travelling public, including awareness of the needs of ethnic groups.

2.0 Contract Specific Information

- 2.1 Names of the staff involved with the contract including the Accredited Vehicle Recovery Operatives(s) and Technician(s). Contact details for these staff .Shift arrangements. Requirements for training certification to be submitted to the Customer/Client.
- 2.2 Details of the recovery vehicles to be used and the certification required to be issued to the Customer/Client.
- 2.3 Name and contact details of Customer Traffic Safety and Control Officer. Liaison requirements including communication of traffic management details.
- 2.4 Details of the communications system(s) to be used, i.e. for communications between the Organizations staff and with the Customer/Client.
- 2.5 Procedures for dealing with recovery response and attendance.
- 2.6 Procedures for dealing with minor road traffic accidents.
- 2.7 Where applicable, procedures for dealing with shed loads and vehicles including hazardous loads, which are beyond the capabilities of the free recovery operation. (See also clause 7.5 of PAS 43:2002)
- 2.8 Customer/Client site record requirements including daily record sheets and logging sheets.
- 2.9 Works programmes, including recovery operations set up and removal times, and times for which recovery is required.
- 2.10 Location details for vehicle station points, drop-off points and accommodation arrangements.
- 2.11 Any special Customer/Client/Police requirements.

2.12 Risk Assessments

APPENDIX B: REFERENCE AND ASSOCIATED DOCUMENTS

- 1 Manual of Contract Documents for Highway Works: Volume 1 Specification for Highway Works (SHW), and amendments
Series 000 Introduction
Series 100 Preliminaries
- 2 Manual of Contract Documents for Highway Works - Volume 2 Notes for Guidance on the Specification for Highway Works (NGSHW), and amendments.
Series NG000 Introduction
Series NG100 Preliminaries
- 3 PAS 43:2002 Safe working of vehicle breakdown and recovery operators (BSI) (Including amendment No 1)
- 4 Code of Practice on Health and Safety for Vehicle Recovery Operators (Association of Vehicle Recovery Operators).
- 5 Traffic Signs Manual : Chapter 8 : Traffic Safety Measures and Signs for Road Works and Temporary Situations.(The Stationery Office)
- 6 Safety at Street Works and Road Works : A Code of Practice.(DOT/The Stationery Office)
- 7 Traffic Signs Regulations and General Directions (The Stationery Office)
- 8 BS EN ISO 9000:2000 Quality Management Systems – Fundamentals and Vocabulary
- 9 BS EN ISO 9001:2000 Quality Management System – Requirements
- 10 BS EN ISO 9004:2000 Quality Management Systems – Guidelines for Performance Improvements
- 11 BS 7121-12:1999 Safe use of cranes – Part 12 Recovery vehicles and equipment – Code of Practice.
- 12 Relevant Health and Safety documents
- 13 Provision and Use of Work Equipment Regulations 1998 (PUWER)
- 14 The Lifting Operations and lifting Equipment Regulations 1998 (LOLER 98)

APPENDIX C: TRAINING AND HEALTH AND SAFETY FOR VEHICLE RECOVERY OPERATIVES AND TECHNICIANS (See also Annex C of PAS 43:2002)

1 Induction

The Organization shall ensure that their Operatives and Technicians have undergone suitable induction training in accordance with the requirements of PAS43 and current H&S legislation, Induction training shall cover all aspects of the work to be undertaken including the following as a minimum:

Recovery vehicles	Training to ensure safe and efficient operation of all the vehicle types that the Operative or Technician works with. Training to identify that the vehicle is in safe and efficient working order. Also training to ensure cleanliness and tidiness of vehicles.
Vehicle equipment, winches and winch ropes	Training to ensure equipment is in working order and is used in safe and efficient manner.
Communications system	Training in the communications system(s) being used.
Wearing of personal protective equipment and clothing	Including high visibility clothing, safety footwear, waterproof clothing, eye protection, gloves, ear defenders (when used under supervision where possible), and safety helmets.
Hazardous substances	Awareness training for recognition of hazardous substances and the precautionary procedures needed to be taken by operatives and technicians in respect of suspected hazardous substances.
Working at the roadside and on live highways	Including access to the broken down vehicle/ incident, care of vehicle occupants.

2 Training

2.1 General

The training and competency requirements are based on the requirements in Annex C of PAS 43:2002, under the auspices of the SSACVR this requirement has been expanded and developed into a recognised national training and competency requirements that operatives and technicians and their employers need to comply with. Details of these requirements are given below. For this particular sector scheme which is applicable only for recovery within construction works, some of the modules and/or elements or parts of elements may not be relevant for operatives to have completed to enable them to meet the requirements of the scheme; the national training committee will be reviewing this and will published guidance as a revision of this document.

Following the appointment of the scheme administrator at the beginning of May 2006, the process of developing relevant training and assessment courses and registration of course instructors was initiated. The scheme administrator anticipates that the basic training modules 1, 2 and 3 for Certified Roadside Operatives will be available in Autumn 2006. Nearer this time, the scheme administrator will produce information about the availability of courses together with information on the target timetable for the introduction of the remaining modules on his web-site (www.theivr.com). Availability of all training and assessment modules is expected to be substantially completed by the end of 2006.

2.2 Transitional Arrangements

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As a consequence of the training and assessment modules not being available for the implementation date of this sector scheme, it will not be possible for Organizations to demonstrate compliance with the National Training requirements outlined in Section 6.2.2 of this scheme document. Accordingly, transitional arrangements shall apply to enable an Organization to comply with the requirements of the sector scheme document and Certification Bodies shall take account of these during their assessments of applicant Organizations. An Organization shall not be refused registration status where operatives do not have relevant registration cards subject to the following rules.

Training and Assessment Modules	Date by which operative/technician must be registered
Modules VR 01 – VR 03 (Basic)	April 2007
Modules VR 04 0 VR 07 (Light Vehicle Recovery)	June 2007
Modules VR 08 – VR 11 (Motorcycle Recovery)	September 2007
Modules VR 12 – VR 16 (Heavy Vehicle Recovery)	June 2007
Modules VR 17 and VR 18 (Additional Modules)	December 2007

Nevertheless Organizations will need to demonstrate that their operatives and technicians are suitably trained and competent and shall provide an assessor with evidence of basic training and assessment of competency for operatives and technicians to demonstrate that they meet reasonable competency standards. This may be based on previous training, supported by appropriate records or based on an assessment of the worker's experience as a recovery operative/technician and supported by his/her employers written declaration of competency as a vehicle recovery/removal operative/technician or both.

Organizations will be expected to demonstrate that they have robust procedures and processes in place for the training and assessment of personnel, to ensure the safety of their employees.

2.3 Training and Assessment Modules

Training is provided on a modular basis as detailed below:

Modules VR 01 to VR 03 - Basic training for Certificated Roadside Operative

Elements for the basic training module include

- Assess the Roadside Situation
- Health and Safety
- Customer Service

These elements are mandatory and on successful completion, the operative will be eligible to be registered as a Certificated Roadside Operative and be issued with the relevant registration card. Basic training is augmented by relevant modules for light vehicle, motorcycle and heavy vehicle recovery, which are detailed below.

Modules VR 01 to VR 07 - Accredited training module for Light Vehicle Recovery

Mandatory Elements	Additional Elements
---------------------------	----------------------------

Ancillary Equipment (LV Recovery)	Spec Frames or Transporters (LV Recovery)	Winching (LV Recovery)	Spec Frames or Transporters (LV Recovery)
Health and Safety (VR 01)			
Customer Service (VR 02)			
Assess Roadside Situation (VR03)			

Modules VR 01 to VR 03 and VR08 to VR 11 - Accredited training module for Motorcycle Recovery

Mandatory Elements			Additional Elements
Handling Motorcycles	Ancillary Equipment (MC Recovery)	Spec Frames or Transporters (MC Recovery)	Spec Frames or Transporters (MC Recovery)
Health and Safety (VR 01)			
Customer Service (VR 02)			
Assess Roadside Situation (VR03)			

Modules VR 01 to VR 03 and VR12 to VR 17 - Accredited training module for Heavy Vehicle Recovery

Mandatory Elements				Additional Elements	
Ancillary Equipment (HV Recovery)	Underlift (HV Recovery)	Twin Boom or Transporters (HV Recovery)	Winching (HV Recovery)	Twin Boom or Transporters (HV Recovery)	Lorry Loaders
Health and Safety (VR 01)					
Customer Service (VR02)					
Assess Roadside Situation (VR 03)					

Notes

- i) Registration cards will only be issued upon successful completion of all the elements at each level
- ii) Successful completion of each individual element at each level will be officially recorded in a recognised passport issued by the scheme administrator and registered by the scheme administrator.
- iii) On successful completion of the mandatory elements an operative will be designated an accredited vehicle recovery operative. On successful completion of the additional elements the operative will be designated an accredited vehicle recovery technician.

Details of these courses may be obtained from the scheme administrator.

Appendix C1 below provides greater information on the syllabi for these courses.

3 National Occupational Standards for Vehicle Recovery Technicians

Optional National Vocational Qualifications (NVQ) for vehicle recovery technicians at levels 2 and 3 which have been developed by Automotiveskills are also available.

The above training and assessment programme, outlined in para 2.3 above, has been developed so that it can provide a natural progression from training through to a national vocational qualification if desired. However holders of the NVQ will still be required to demonstrate their competence via skills assessment under this scheme.

Details of the NVQs are given below

Qualification: **ROADSIDE ASSISTANCE AND RECOVERY LEVEL 2**

Route for:	Certificate title:
Light Vehicle Recovery Technician	Roadside Assistance and Recovery Level 2 (Light Vehicle Recovery)
Heavy Vehicle Recovery Technician	Roadside Assistance and Recovery Level 2 (Heavy Vehicle Recovery)
Motorcycle Recovery Technician	Roadside Assistance and Recovery Level 2 (Motorcycle Recovery)

Qualification: **ROADSIDE ASSISTANCE AND RECOVERY LEVEL 3**

Route for:	Certificate title:
Light Vehicle Recovery Technician	Roadside Assistance and Recovery Level 3 (Light Vehicle Recovery)
Heavy Vehicle Recovery Technician	Roadside Assistance and Recovery Level 3 (Heavy Vehicle Recovery)
Light Vehicle Roadside Technician	Roadside Assistance and Recovery Level 3 (Roadside Assistance - Light Vehicles)
Heavy Vehicle Roadside Technician	Roadside Assistance and Recovery Level 3 (Roadside Assistance - Heavy Vehicles)
Motorcycle Roadside Technician	Roadside Assistance and Recovery Level 3 (Roadside Assistance - Motorcycles)

4 Health and Safety

Organizations are reminded of the legal requirements to provide health and safety training for each vehicle recovery Operative and Technician in accordance with the Health and Safety at Work Etc Act 1974.

The training and assessment of operatives and technicians required by this Scheme is aimed primarily at technical competence for vehicle removal and recovery. It is intended to provide awareness to carry out work in a safe manner however it remains the responsibility of the Organization to determine and implement safe systems of work.

5 Reference Documents

Life on the edge 1-6 [Videos] – The Institute of Vehicle Recovery, West Drayton, Middx

August 2006 ■ UKAS Issue 2

NHSS 17

APPENDIX C1: TRAINING MODULES FOR VEHICLE RECOVERY TECHICIAN AND OPERATIVE ACCREDITATION

The following training modules have been developed by industry as the National Standard for vehicle recovery technicians and operatives. They are based on the National Occupation Standards developed by Automotiveskills and will be used to develop training courses within the industry.

The modules are being published now to provide trainers with information on the modules; the national training committee will be developing these further as part of an on-going programme of work into training courses with robust administration of the delivery and assessment of the course including assessment of the candidates at completion of the course.

NOTE: For this sector scheme which is applicable only for recovery within construction works, some of the modules and/or elements or parts of elements may not be relevant for operatives to have completed to enable them to meet the requirements of the scheme; the national training committee will be reviewing this and will published guidance as a revision of this document.

**National Highway Sector Scheme for Vehicle
Recovery Operations**

Sector Scheme 17

**Vehicle Recovery
Technician Accreditation**

**National
Training Modules**

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Accredited Motorcycle Recovery Technician

VR 08	Handling Motorcycles (Motorcycle Recovery)
VR 09	Ancillary Equipment (Motorcycle Recovery)
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Accredited Heavy Vehicle Recovery Technician

VR 12	Ancillary Equipment (Heavy Vehicle Recovery)
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Additional Modules

VR 17	Lorry Loaders
VR 18	Air Cushions

VR 01	Health and Safety
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Certificated Recovery Operator

This module is about meeting health and safety requirements when carrying out the day to day duties recovering vehicles.

LEARNING OBJECTIVES	
To achieve this module a student has to:	
1	Identify the current health and safety legislation as it affects vehicle recovery
2	Identify suitable personal protective equipment and describe its use
3	State the responsibilities of an individual with regards to accident prevention in the workplace
4	Explain the legislation and best practices regarding fire prevention and fire fighting in the workplace
5	Explain the need for good housekeeping procedures within the workplace
6	State the different types of tools and cleaning equipment that are used and their storage requirements
7	Explain the importance of using company resources economically within the workplace
8	Identify the hazards and risks relating to equipment

1. Identify the current health and safety legislation as it affects vehicle recovery

Content Detail:

- health and safety and associated legislation that affects vehicle recovery, including:
 - The Health & Safety at Work Law
 - Workforce Directive
 - Office, Shops and Railway Premises Act
 - Control of Substances Hazardous to Health Regulations
 - Reporting of Injuries, Diseases and Dangerous Occurrences
 - regulations governing working equipment (including abrasive wheels)
 - The Work at Height Regulations 2005
 - regulations governing electricity
 - regulations governing disposal of waste products
 - regulations governing manual handling
 - regulations governing lifting operations and equipment
(LOLER/PUWER)
 - regulations governing use of vehicles
 - regulations governing movement of people
 - regulations governing noise
 - regulations governing computers and display screen equipment.
- codes of practice (PAS 43)
- how these affect:
 - employers
 - employees
 - customers
 - public
- health and safety signage
- company health and safety policy
- role of the Health and Safety Executive.

2. Identify suitable personal protective equipment and describe its use

Content Detail:

- the personal protective equipment that should be used, including:
 - company uniform or overalls
 - safety shoes or boots (BS1870)
 - gloves
 - safety goggles/glasses (BS2092)
 - hard hat (BS6629)
 - wet weather clothing
 - reflective jackets (BS6629) Class A (App G)
- when and why each of these should be used
- the dangers of not using personal protective equipment
- personal hygiene.

3. State the responsibilities of an individual with regard to accident prevention in the workplace

Content Detail:

- why accidents happen at work
- accident prevention
- risk assessment
- reporting accidents
- first aid facilities and practices
- reporting faulty equipment
- effects of not reporting faulty equipment.

4. Explain the legislation and best practices regarding fire prevention and fire fighting in the workplace

Content Detail:

- current fire fighting equipment required
- potential fire hazards within the workplace
- typical fire alarm and evacuation procedure.

5. Explain the need for good housekeeping procedures within the workplace

Content Detail:

- general housekeeping requirements within the workplace
- maintaining a safe working area
- benefits of a clean working environment
- potential problems or hazards that can develop through poor housekeeping (e.g. spillages, obstructions etc.)
- maintaining tools and equipment.

6. State the different types of tools and cleaning equipment that are used and their storage requirements

Content Detail:

- tools, equipment and cleaning solutions used to carry out normal cleaning duties within the workplace
- storage/disposal requirements.

7. Explain the importance of using company resources economically within the workplace

Content Detail:

- definition of a company resource
- typical company resources that apply to vehicle recovery operations
- using resources efficiently and economically.

8. Identify the hazards and risks relating to equipment

Content Detail:

- identification of risks and hazards associated with workplace equipment and resources including:
 - electricity
 - fuel, paint and acids
 - high pressure hoses
 - axle stands
 - hydraulic jacks
- identification of risks and hazards associated with recovery equipment including:
 - ropes and straps
 - tow poles
 - 'A' frames
 - automatically deployed recovery equipment
 - spectacle frames
 - transporters
 - winches.

VR 02	Customer Service
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Certificated Recovery Operator

This module covers all aspects of providing a service to the customer. It is also about working with people effectively to achieve a goal.

LEARNING OBJECTIVES
To achieve this module a student has to:

1	Explain how to build and maintain effective working relationships
2	Describe the different forms of communication used within the recovery industry
3	Identify the different types of customers and their needs
4	Explain how to create a positive impression of yourself and your organisation
5	Explain how to identify a potentially dissatisfied customer

1. Explain how to build and maintain effective working relationships

Content Detail:

- the importance of developing positive working relationships with colleagues and customers
- why working as a team is important
- making and keeping commitments to others
- keeping within your own level of authority
- the effects of poor working relationships on company image, productivity and morale
- legislation:
 - discrimination
 - equal opportunities
 - consumer law.

2. Describe the different forms of communication used within the recovery industry

Content Detail:

- the importance of good communication
- different forms of communication, including:
 - verbal communication (face to face, radio, telephone etc.)
 - written communication (forms, letters, messages)
 - electronic communication (mobile data terminals, e-mails, internet, intranet)
- how each of these can be used effectively
- the need for accurate completion of documents.

3. Identify the different types of customers and their needs

Content Detail:

- types of customer that would request vehicle recovery including:
 - motoring organisations
 - local authorities
 - emergency services
 - government agencies (e.g. highways)
 - other recovery operators
 - individuals

- different customer needs including:
 - speed of response
 - right resources first time
 - value for money
 - specialist services.

4. Explain how to create a positive impression of yourself and your organisation

Content Detail:

- creating a good impression:
 - personal appearance
 - behaviour
 - interaction with others

- importance of a good first impression

- the effects of a bad impression

- vehicle appearance

- areas accessible to customers.

5. Explain how to identify a potentially dissatisfied customer

Content Detail:

- characteristics of a dissatisfied customer including:
 - tone of voice
 - body language
- overcoming customer complaints (within authority levels)
- the importance of resolving customer concerns and complaints quickly and amicably.

VR 03	Assess the Roadside Situation
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Certificated Recovery Operator

This module is about identifying and meeting the health and safety requirements when carrying out routine vehicle recovery procedures.

LEARNING OBJECTIVES	
To achieve this module a student has to:	
1	State the individual roles and responsibilities with regard to safety at the roadside
2	Explain how to approach the scene
3	Describe how to carry out a risk assessment prior to recovering the vehicle
4	Describe the procedure for leaving the scene

1. State the individual roles and responsibilities with regard to safety at the roadside

Content Detail:

- recovery technician
- emergency services:
 - police
 - ambulance
 - fire and rescue
- highway authorities
- vehicle driver
- passenger management and welfare.

2. Explain how to approach the scene

Content Detail:

- safety requirements including:
 - flow of traffic
 - parking position
 - distance to casualty vehicle
 - beacons
 - personal protective equipment
 - exiting from recovery vehicle
- codes of practice (PAS 43)
- communication/reporting requirements:
 - relevant people/organisations
 - appropriate methods.

3. Describe how to carry out a risk assessment prior to recovering the vehicle

Content Detail:

- people present
- road conditions including:
 - closed
 - open
- traffic management
- weather conditions
- casualty vehicle including:
 - damaged
 - locked
 - unattended
- loads and their risks
- recovery techniques
- tools and equipment.

4. Describe the procedure for leaving the scene

Content Detail:

- debris
- spillages
- tools and equipment
- manoeuvring the vehicle
- reporting the situation:
 - communication
 - documentation.

VR 04	Ancillary Equipment (Light Vehicle Recovery)
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Accredited Light Vehicle Recovery Technician

This module is about using ancillary recovery equipment when recovering light vehicles.

LEARNING OBJECTIVES	
To achieve this module a student has to:	
1	Identify the health and safety requirements applicable to the use of ancillary equipment
2	Explain the terms flat tow, suspend tow and total lift
3	Describe the different types of equipment used for flat tow
4	Describe the operating procedures for towing using a rope or strap
5	Describe the operating procedures when towing using a tow pole
6	Identify other types of ancillary equipment

1. Identify the health and safety requirements applicable to the use of ancillary equipment

Content Detail:

- risk assessment
- handling requirements:
 - manual handling
 - recovery equipment
 - casualty vehicle
- responsibilities:
 - technician
 - legal requirements
 - customer service.

2. Explain the terms flat tow, suspend tow and total lift

Content Detail:

- flat tow
- suspend tow
 - front
 - rear
- total lift.

3. Describe the different types of equipment used for flat tow

Content Detail:

- principles of movement
- types of equipment
 - tow rope or strap
 - rigid tow pole
 - 'A' frame.
- appropriate use.

4. Describe the operating procedures for towing using a rope or strap

Content Detail:

- legal requirements including:
 - restrictions on use (emergencies)
 - towing length
 - safe working load (gross weight)
 - lighting/markings (number plates)
 - speed restrictions
 - maintenance procedures
- towing characteristics including:
 - movement
 - snatching (increased stress)
 - stopping distance
 - damage
- common problems.

5. Describe the operating procedures when towing using a tow pole

Content Detail:

- legal requirements including:
 - restrictions on use
 - safe working load (gross weight)
 - lighting/markings (number plates)
 - speed restrictions
 - maintenance procedures
- towing characteristics
- steering techniques
- loading/unloading procedures.

6. Identify other types of ancillary equipment

Content Detail:

- types of equipment including:
 - towing dollies
 - trailers
 - 'A' frames
 - skates
 - dolly wheels
 - automatically deployed recovery equipment
- legal requirements including:
- towing characteristics
- loading/unloading procedures.

VR 05	Spectacle Frames (Light Vehicle Recovery)
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Accredited Light Vehicle Recovery Technician

This module is about using spectacle frame units (spec-frames) when carrying out routine recovery procedures. The module also covers safety aspects associated with the use of spec-frames

LEARNING OBJECTIVES
To achieve this module a student has to:

1	Identify the health and safety requirements applicable to the use of spectacle frames
2	Describe spectacle frame variations
3	Explain the performance features of spec-frames
4	Describe the equipment checks associated with spec-frames
5	Describe the vehicle checks required
6	Explain the purpose and function of cross heads and fittings
7	Describe the loading procedure using spec frames
8	Explain the towing procedure and potential hazards
9	Describe the procedure for releasing the casualty vehicle

1. Identify the health and safety requirements applicable to the use of spectacle frames

Content Detail:

- risk assessment
- handling requirements:
 - manual handling
 - recovery equipment
 - casualty vehicle
- responsibilities:
 - technician
 - legal requirements
 - customer service.

2. Describe spectacle frame variations

Content Detail:

- boom extension:
 - manual
 - hydraulic
- wheel frames:
 - fixed
 - folding
 - removable
 - adjustable
 - spacers
- winches:
 - hydraulic
 - electric.

3. Explain the performance features of spec-frames

Content Detail:

- stability
- safe working loads
- appropriate use.

4. Describe the equipment checks associated with spec-frames

Content Detail:

- frequency of checks
- spec-frame checks including:
 - damage
 - missing parts
 - leakage (hydraulic/pneumatic)
 - lubrication
 - cables (frayed, incorrect winding)
 - winch
- loose equipment checks including:
 - traffic cones
 - tool box
 - tow (lighting) board
 - ratchets and straps
 - axle stands
 - chocks and padding
- proof certificates.
Identification Plates

5. Describe the vehicle checks required

Content Detail:

- frequency of checks
- **F.L.O.W.E.R**
 - Fuel
 - Lights
 - Oil
 - Water
 - Electrics
 - Rubber (tyres).

6. Explain the purpose and function of cross heads and fittings

Content Detail:

- extending boom
- cross head pivot
- wheel frames
- ratchet and wheel straps
- spacer bars.

7. Describe the loading procedure using spec frames

Content Detail:

- casualty vehicle preparation:
 - front suspend tow
 - rear suspend tow
- frame positioning
- casualty vehicle valance/bumper clearance
- operator position (safety)
- distance between towing vehicle and casualty vehicle
- fitting retaining straps
- raising casualty vehicle
- fitting lighting board.

8. Explain the towing procedure and potential hazards

Content Detail:

- safety checks before moving off
- defensive driving procedures
- potential hazards while driving including:
 - road camber
 - loading ramps
 - road damage
 - humps in the road (sleeping policemen)
 - level crossings
- hazardous cargoes.

9. Describe the procedure for releasing the casualty vehicle

Content Detail:

- parking brakes
- connecting winch cable
- releasing retaining straps
- lowering casualty
- use of wooden pads
- stowing boom and equipment.

VR 06	Transporters (Light Vehicle Recovery)
--------------	--

Accredited Light Vehicle Recovery Technician

This module is about using transporters when carrying out routine recovery procedures. The module also covers safety aspects associated with the use of transporters.

LEARNING OBJECTIVES

To achieve this module a student has to:

1	Identify the health and safety requirements applicable to the use of transporters
2	Identify the different types of transporters
3	Explain the performance features of transporters
4	Describe the equipment checks associated with transporters
5	Describe the vehicle checks required
6	Describe the loading procedure using a fixed bed transporter
7	Describe the loading procedure using a slidebed transporter
8	Explain the transporting procedure and potential hazards
9	Describe the procedure for unloading the casualty vehicle

1. Identify the health and safety requirements applicable to the use of transporters

Content Detail:

- risk assessment
- handling requirements:
 - manual handling
 - recovery equipment
 - casualty vehicle
- responsibilities:
 - technician
 - legal requirements
 - customer service.

2. Describe the different types of transporters

Content Detail:

- fixed bed
- slide bed
- variations.

3. Explain the performance features of transporters

Content Detail:

- stability
- safe working loads
- winch positioning
- appropriate use.

4. Describe the equipment checks associated with transporters

Content Detail:

- frequency of checks
- equipment checks including:
 - damage
 - missing parts
 - leakage (hydraulic/pneumatic)
 - lubrication
 - cables (frayed, incorrect winding)
 - winch
- loose equipment checks including:
 - traffic cones
 - tool box
 - ratchets and straps
 - brothers
 - wheel protection
 - skates
- proof certificates.
Identification Plates

5. Describe the vehicle checks required

Content Detail:

- frequency of checks
- **F.L.O.W.E.R**
 - **F**uel
 - **L**ights
 - **O**il
 - **W**ater
 - **E**lectrics
 - **R**ubber (tyres).

6. Describe the loading procedure using a fixed bed transporter

Content Detail:

- controls
- deployment of ramps
- bed positioning
- restraining/securing devices
- bed locking devices
- assessing vehicle clearance
- operator position (safety)
- front and rear first loading
- connecting winch to casualty
- winching casualty
 - steerable
 - non-steerable

7. Describe the loading procedure using a slidebed transporter

Content Detail:

- controls
- deployment of slidebed
- bed positioning
- restraining/securing devices
- bed locking devices
- assessing vehicle clearance
- operator position (safety)
- front and rear first loading
- connecting winch to casualty
- winching casualty
 - steerable
 - non-steerable
- second/third vehicle lifts.

8. Explain the transporting procedure and potential hazards

Content Detail:

- safety checks before moving off
- defensive driving procedures
- potential hazards while driving
- hazardous cargoes.

9. Describe the procedure for unloading the casualty vehicle

Content Detail:

- safety when unloading
 - parking brakes
 - vehicle positioning
- features of unloading
 - fixed bed
 - slidebed
- use of winch
- steerable and non-steerable casualty vehicles

VR 07	Winching (Light Vehicle Recovery)
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Accredited Light Vehicle Recovery Technician

This module is about recovering light vehicles from situations where a winch is required to place the vehicle in a position to be loaded on to a recovery vehicle.

It involves using winches with a working capacity up to and including 8000 lbs.

LEARNING OBJECTIVES

To achieve this module a student has to:

1	Identify the health and safety requirements applicable to the use of winches
2	Identify the types of winch used to recover light vehicles
3	Explain winch theory
4	Identify the types of winch ropes used to recover light vehicles
5	Identify the ancillary equipment used when winching a light vehicle
6	Identify (and calculate) the different resistances to winching when recovering a light vehicle
7	Describe the methods used to change direction of pull or increasing the pull of the winch
8	Describe the effect of the casualty's position on the winching operation
9	Describe the methods used to right an overturned light vehicle
10	Describe the hand signals used to direct a winch operator

1. Identify the health and safety requirements applicable to the use of winches

Content Detail:

- risk assessment
- handling requirements:
 - manual handling
 - recovery equipment
 - casualty vehicle
- responsibilities:
 - technician
 - legal requirements
 - customer service.

2. Identify the types of winch used to recover light vehicles.

Content Detail:

- hydraulic, including
 - operation
 - controls
 - safety features
- electric, including
 - operation
 - controls
 - safety features
- mechanical/manual, including
 - operation
 - controls
 - safety features.

3. Explain winch theory.

Content Detail:

- winch power:
 - mechanical advantage
 - velocity ratio
 - rope layers

- winch rating
 - safe working load
 - minimum
 - maximum
 - leverages
 - rope layers

- matching equipment
 - drum
 - rope
 - sheaths.

4. Identify the types of winch rope used to recover light vehicles.

Content Detail:

- strength of a winch
- matching a winch and winch rope
- life of a winch rope
- care of a winch rope
- inspecting a winch rope, including:
 - identification of damage
 - types of damage
- broken wires, including:
 - broken wire allowance
 - dealing with broken wires
- rope construction, including:
 - course laid 7x7
 - g.p. fibre core 6x19
 - extra flexible 6x36
 - rope lay
 - visual inspection
 - rope eyes
 - end fixings
 - hooks
- breaking loads and safe working loads
- test certification.

5. Identify the ancillary equipment used when winching a light vehicle.

Content Detail:

- snatch blocks, including:
 - construction
 - types
 - safe working loads

- chains, including:
 - construction
 - types
 - safe working loads

- shackles, including:
 - construction
 - types
 - safe working loads

- scotch blocks, including:
 - use

6. Identify resistances to winching and calculate the effects

Content Detail:

- rolling resistance, including:
 - smooth road, grass, gravel, shingle, sand, mud, soft clay, bog to axle, bog to top of wheel, bog to top of bonnet
 - calculations
- damage resistance, including calculations
- gradient resistance, including calculations
- total resistances, including calculations.

7. Describe the methods used to increase the pull of the winch or change direction of the winch rope

Content Detail:

- doubling the pull of the winch, including calculations
- multiplying the pull of the winch, including:
 - one rope
 - two ropes
 - calculations
- effects of angles on ropes, including calculations
- ground anchors
- dead men.

8. Describe the effects of the casualty's position on the winching operation.

Content Detail:

- winching up a steep slope, including:
 - direction of traffic
 - type of road
 - sequence of operations
 - alternatives

- winching down a steep slope, including:
 - direction of traffic
 - type of road
 - sequence of operations
 - alternatives

- jack-knife vehicles.

9. Describe the methods used to right an overturned light vehicle

Content Detail:

- types of vehicle, including:
 - cars
 - car derived vans
 - caravans
- moments, including: fulcrum, effort, force and load
- levers
- centre of gravity, including:
 - homogenous object
 - uneven object
 - combining centres of gravity
- stability
- calculations
- techniques.

10. Describe the hand signals used to direct a winch operator.

Content Detail:

- hand signals:
 - single winch
 - twin winches.

VR 08	Handling Motorcycles
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Accredited Motorcycle Recovery Technician

This module is about handling motorcycles in a safe manner without damage.

LEARNING OBJECTIVES	
To achieve this module a student has to:	
1	Identify the health and safety requirements applicable to handling motorcycles
2	Identify the handling requirements for motorcycles

1. Identify the health and safety requirements applicable to handling motorcycles

Content Detail:

- risk assessment
- handling requirements:
 - manual handling
 - recovery equipment
 - casualty vehicle
- responsibilities:
 - technician
 - legal requirements
 - customer service.

2. Identify the handling requirements for motorcycles

Content Detail:

- handling/manoeuvring:
 - weight
 - balance
 - use of centre and side stands
- lifting using a lorry loader
- accident recovery.

VR 09	Ancillary Equipment – Motorcycle Recovery
--------------	--

Accredited Motorcycle Recovery Technician

This module is about using ancillary recovery equipment when recovering motorcycles.

LEARNING OBJECTIVES	
To achieve this module a student has to:	
1	Identify the health and safety requirements applicable to the use of ancillary equipment
2	Describe the types of equipment used to recover motorcycles
3	Describe the operating procedures for recovering motorcycles on a purpose built trailer
4	Describe the operating procedures for recovering motorcycles in purpose built vehicles
5	Describe the operating procedures for recovering motorcycles using wheel cradles

1. Identify the health and safety requirements applicable to the use of ancillary equipment

Content Detail:

- risk assessment
- handling requirements:
 - manual handling
 - recovery equipment
 - casualty vehicle
- responsibilities:
 - technician
 - legal requirements
 - customer service.

2. Describe the types of equipment used to recover motorcycles

Content Detail:

- 'spec lifts'
- transporters
- motorcycle trailers
 - general
 - self loading
- purpose built recovery vehicle.

3. Describe the operating procedures for recovering motorcycles on a purpose built trailer

Content Detail:

- loading sequence
- strapping down, including:
 - types of straps
 - safety points
 - securing points
- unloading
- maintenance.

4. Describe the operating procedures for recovering motorcycles using purpose built recovery vehicles

Content Detail:

- types of purpose built vehicles
- loading sequence
- strapping down, including:
 - types of strap or other securing device
 - safety points
 - securing points
- unloading
- maintenance.

5. Describe the operating procedures for recovering motorcycles using wheel cradles

Content Detail:

- types of wheel cradles
 - fixed
 - wheeled
- loading sequence
- strapping down, including:
 - types of strap or other securing device
 - safety points
 - securing points
- unloading
- maintenance.

VR 10	Spectacle Frames (Motorcycle Recovery)
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Accredited Motorcycle Recovery Technician

This module is about using ‘spec lift’ recovery vehicles to recover motorcycles.

LEARNING OBJECTIVES	
To achieve this module a student has to:	
1	Identify the health and safety requirements applicable to the use of spectacle frames
2	Describe ‘spec lift’ recovery vehicles applicable to motorcycle recovery
3	Describe the operating procedures for recovering motorcycles using a ‘spec lift’

1. Identify the health and safety requirements applicable to the use of spectacle frames

Content Detail:

- risk assessment
- handling requirements:
 - manual handling
 - recovery equipment
 - casualty vehicle
- responsibilities:
 - technician
 - legal requirements
 - customer service.

2. Describe 'spec lift' recovery vehicles applicable to motorcycle recovery

Content Detail:

- types of vehicle:
 - transverse mounting
 - for and aft mounting
- safety features
- components
- maintenance.

3. Describe the operating procedures for recovering motorcycles using a 'spec lift' recovery vehicle.

Content Detail:

- using a transverse motorcycle attachment
 - mounting the attachment
 - loading
 - securing the motorcycle
 - unloading

- using a for and aft motorcycle attachment
 - mounting the attachment
 - loading
 - securing the motorcycle
 - unloading.

VR 11	Transporters (Motorcycle Recovery)
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Accredited Motorcycle Recovery Technician

This module is about using transporters to recover motorcycles.

LEARNING OBJECTIVES	
To achieve this module a student has to:	
1	Identify the health and safety requirements applicable to the use of transporters
2	Describe transporters applicable to motorcycle recovery
3	Describe the operating procedures for recovering motorcycles using a transporter

1. Identify the health and safety requirements applicable to the use of transporters

Content Detail:

- risk assessment
- handling requirements:
 - manual handling
 - recovery equipment
 - casualty vehicle
- responsibilities:
 - technician
 - legal requirements
 - customer service.

2. Describe transporters applicable to motorcycle recovery

Content Detail:

- types of vehicle:
- safety features
- components
- maintenance.

3. Describe the operating procedures for recovering motorcycles using a transporter

Content Detail:

- loading
- securing the motorcycle
- unloading
- manual handling

VR 12	Ancillary Equipment (Heavy Vehicle Recovery)
--------------	---

Accredited Heavy Vehicle Recovery Technician

This module is about using ancillary recovery equipment when recovering heavy vehicles.

LEARNING OBJECTIVES	
To achieve this module a student has to:	
1	Identify the health and safety requirements applicable to the use of ancillary equipment
2	Explain the terms flat tow, suspend tow and total lift
3	Describe the different types of equipment used for flat tow
4	Describe the operating procedures when towing using a tow pole
5	Identify other types of ancillary equipment

1. Identify the health and safety requirements applicable to the use of ancillary equipment

Content Detail:

- risk assessment
- handling requirements:
 - manual handling
 - recovery equipment
 - casualty vehicle
- responsibilities:
 - technician
 - legal requirements
 - customer service.

2. Explain the terms flat tow, suspend tow and total lift

3. Describe the different types of equipment used for flat tow

Content Detail:

- principles of movement
- types of equipment
 - rigid tow pole
- appropriate use.

4. Describe the operating procedures for towing using a rope or strap

Content Detail:

- legal requirements including:
 - restrictions on use
 - safe working load (gross weight, train weight)
 - lighting/markings (number plates)
 - speed restrictions
 - maintenance procedures
- towing characteristics

- steering techniques (multiple pivot points)
- connecting and releasing tow poles.

5. Identify other types of ancillary equipment

Content Detail:

- types of equipment including:
 - trailers
 - high pressure mats
- legal requirements including:
 - restrictions on use
 - speed restrictions
 - safe working load (gross weight)
 - lighting/markings (number plates)
 - maintenance procedures
- towing characteristics
- loading/unloading procedures.

VR 13	Underlift
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Route: Vehicle Recovery Technician

This module is about using underlift units when carrying out routine recovery procedures. The module also covers safety aspects associated with the use of underlifts.

LEARNING OBJECTIVES

To achieve this module a student has to:

1	Identify the health and safety requirements applicable to the use of underlifts
2	Describe underlift variations
3	Explain the performance features of underlifts
4	Describe the equipment checks associated with underlifts
5	Describe the vehicle checks required
6	Explain the purpose of stabilisers
7	Describe stabiliser leg deployment procedure
8	Explain the purpose and function of cross heads and fittings
9	Describe the loading procedure using underlifts (lifting forks)
10	Explain the towing procedure and potential hazards
11	Describe the procedure for releasing the casualty vehicle

1. Identify the health and safety requirements applicable to the use of ancillary equipment

Content Detail:

- risk assessment
- handling requirements:
 - manual handling
 - recovery equipment
 - casualty vehicle
- responsibilities:
 - technician
 - legal requirements
 - customer service.

2. Describe underlift variations

Content Detail:

- Mounting:
 - fixed
 - sliding
- boom extension:
 - manual
 - hydraulic
- wheel frames
- lifting forks
- spring slippers.

3. Explain the performance features of an underlift

Content Detail:

- stability
- safe working loads
- proof load certificates/CE plate
- gross combination mass
- appropriate use
- levers and moments:
 - first class levers
 - second class levers
- wheel base versus overhang
- effects on host chassis:
 - weight transference
 - axle weights
 - legal requirements
 - braking
 - steering
 - stress.

4. Describe the equipment checks associated with underlift

Content Detail:

- frequency of checks
- underlift checks including:
 - damage
 - missing parts
 - leakage (hydraulic/pneumatic)
 - lubrication
- loose equipment checks including:
 - first aid kit
 - traffic cones
 - tool box
 - wheel grids
 - lifting forks
 - tow (lighting) board
 - ratchets and straps
 - strops
 - chains
 - snatch blocks
 - axle stands
 - chocks and padding
 - timber baulks.

5. Describe the vehicle checks required

Content Detail:

- frequency of checks
 - daily
 - before use
- **F.L.O.W.E.R**
 - **F**uel
 - **L**ights
 - **O**il
 - **W**ater
 - **E**lectrics/Equipment
 - **R**ubber (tyres).

6. Explain the purpose and function of stabiliser leas

Content Detail:

- stabiliser variations
 - manual
 - hydraulic
- appropriate use
- stability

7. Describe stabiliser leg deployment procedure

Content Detail:

- precautions
- dangers
- deployment
- pads
- spades
- stowing
- locking devices

8. Explain the purpose and function of cross heads and fittings

Content Detail:

- extending boom
- cross head pivot
- wheel grids
- lifting forks
- spring slippers
- ratchet and wheel straps
- chains and tensioner's
- spacer bars

9. Describe the loading procedure using underlift

Content Detail:

- power take off
- controls
- casualty vehicle preparation:
 - front suspend tow
 - rear suspend tow
- frame positioning
- fork positioning
- wheel grid positioning
- casualty vehicle air deflector clearance
- casualty rear crash bar clearance
- operator position (safety)
- temporary supports (chocks, axle stands)
- distance between towing vehicle and casualty vehicle
- fitting retaining straps
- fitting chains
- raising casualty vehicle
- fitting light board.

10. Explain the towing procedure and potential hazards

Content Detail:

- safety checks before moving off
- defensive driving procedures
- multiple pivot points (articulated casualties)
- pedestrian awareness of recovery vehicles
- other road users awareness of recovery vehicles
- route planning
 - height
 - weight restrictions
- potential hazards while driving including:
 - road camber
 - loading ramps
 - road damage
 - humps in the road (sleeping policemen)
 - level crossings
- hazardous cargoes

11. Describe the procedure for releasing the casualty vehicle

Content Detail:

- parking brakes
- air lines
- connecting remote winch
- releasing retaining straps, chains
- lowering casualty
- use of wooden pads
- stowing boom and equipment.

VR 14	Twin booms
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Route: Vehicle Recovery Technician

This module is about using twin boom units when carrying out routine recovery procedures. The module also covers safety aspects associated with the use of twin booms

LEARNING OBJECTIVES

To achieve this module a student has to:

1	Identify the health and safety requirements applicable to the use of twin booms
2	Describe twin booms
3	Explain the performance features of twin booms
4	Describe the equipment checks associated with twin booms
5	Describe the vehicle checks required
6	Explain the purpose of outriggers and rear support feet
7	Describe outrigger and rear support feet deployment procedures
8	Describe boom rigging procedures
9	Explain the purpose and function of 'A' frame and fittings
10	Describe the loading procedure using an 'A' frame
11	Explain the towing procedure and potential hazards
12	Describe the procedure for releasing the casualty vehicle

1. Identify the health and safety requirements applicable to the use of twin booms

Content Detail:

- risk assessment
- handling requirements:
 - manual handling
 - recovery equipment
 - casualty vehicle
- responsibilities:
 - technician
 - legal requirements
 - customer service.

2. Describe twin booms

Content Detail:

- variations
 - manual
 - hydraulic
- boom extension:
 - manual
 - hydraulic
- locks and safety devices.

3. Explain the performance features of twin booms

Content Detail:

- stability
- safe working loads
- proof load certificates
- appropriate use
- levers & moments
- wheel base versus overhang
- effects on host chassis
 - weight transference
 - axle weights
 - legal requirements
 - stress
 - steering
 - braking.

4. Describe the equipment checks associated with twin booms

Content Detail:

- frequency of checks
- twin boom checks including:
 - damage
 - missing parts
 - leakage (hydraulic/pneumatic)
 - lubrication
 - safety chains
 - safety pins
- loose equipment checks including:
 - first aid kit
 - traffic cones
 - tool box
 - tow (lighting) board
 - ratchets and straps
 - strops
 - chains
 - hooks
 - shackles
 - snatch blocks
 - axle stands
 - chocks and padding
 - scotch blocks
 - timber baulks
 - winch handles.

5. Describe the vehicle checks required

Content Detail:

- frequency of checks
 - daily
 - before use
- **F.L.O.W.E.R**
 - **F**uel
 - **L**ights
 - **O**il
 - **W**ater
 - **E**lectric's / Equipment
 - **R**ubber (tyres).

6. Explain the purpose and function of outriggers and support feet

Content Detail:

- stabiliser variations:
 - manual
 - hydraulic
- appropriate use
- stability
- locking devices
- restraining devices (chains).

7. Describe outrigger and support feet deployment procedures

Content Detail:

- precautions
- dangers
- deployment
- pads
- stowing
- locking devices
- scotch blocks
- restraining devices.

8. Describe boom raising procedures

Content Detail:

- variations:
 - manual
 - electric
 - hydraulic
- precautions
- dangers
- raising booms
- splitting booms
- extending booms
- locking devices.

9. Explain the purpose and function of 'A' frames and fittings

Content Detail:

- describe an 'A' frame
- lifting chains
- overhead booms
- service winches
- winch ropes.

10. Describe the loading procedure using an 'A' frame

Content Detail:

- casualty vehicle preparation:
 - front suspend tow
 - rear suspend tow
- frame positioning
- casualty vehicle air deflector clearance
- casualty crash bar clearance
- use of protective timber baulks
- operator position (safety)
- temporary supports (chocks, axle stands)
- fitting retaining straps
- fitting chains
- raising casualty vehicle
- fitting light board.

11. Explain the towing procedure and potential hazards

Content Detail:

- safety checks before moving off
- defensive driving procedures
- multiple pivot points (articulated casualties)
- pedestrian awareness of recovery vehicles
- other road users awareness of recovery vehicles
- route planning:
 - height
 - weight restrictions
- potential hazards while driving including:
 - road camber
 - loading ramps
 - road damage
 - humps in the road (sleeping policemen)
 - level crossings
- hazardous cargoes

12. Describe the procedure for releasing the casualty vehicle

Content Detail:

- parking brakes
- air lines
- connecting remote winch
- releasing retaining straps, chains
- lowering casualty
- use of wooden pads
- stowing 'A' frame, booms and equipment.

VR 15	Transporters (Heavy Vehicle Recovery)
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Route: Vehicle Recovery Technician

This module is about using transporters when carrying out routine recovery procedures. The module also covers safety aspects associated with the use of transporters

LEARNING OBJECTIVES

To achieve this module a student has to:

1	Identify the health and safety requirements applicable to the use of transporters
2	Identify the different types of transporters
3	Explain the performance features of transporters
4	Describe the equipment checks associated with transporters
5	Describe the vehicle checks required
6	Describe the loading procedure using a fixed bed transporter
7	Describe the loading procedure using a slidebed transporter
8	Explain the transporting procedure and potential hazards
9	Describe the procedure for unloading the casualty vehicle

1. Identify the health and safety requirements applicable to the use of transporters

Content Detail:

- risk assessment
- handling requirements:
 - manual handling
 - recovery equipment
 - casualty vehicle
- responsibilities:
 - technician
 - legal requirements
 - customer service.

2. Describe the different types of transporters

Content Detail:

- fixed bed
- slidebed
- variations.

3. Explain the performance features of transporters

Content Detail:

- stability:
 - centre of gravity
 - leverage
- safe working loads:
 - gross vehicle weight/gross vehicle mass
 - gross train weight
- proof load certificate
- winch positioning
- appropriate use.

4. Describe the equipment checks associated with transporters

Content Detail:

- frequency of checks
- equipment checks including:
 - damage
 - missing parts
 - leakage (hydraulic/pneumatic)
 - lubrication
 - cables (frayed, incorrect winding)
 - winch
- loose equipment checks including:
 - first aid kit
 - traffic cones
 - tool box
 - ratchets and straps
 - brothers
 - skates
 - wheel protection
 - lighting board.

5. Describe the vehicle checks required

Content Detail:

- frequency of checks
- **F.L.O.W.E.R**
 - **F**uel
 - **L**ights
 - **O**il
 - **W**ater
 - **E**lectric's/Equipment
 - **R**ubber (tyres).

6. Describe the loading procedure using a fixed bed transporter

Content Detail:

- controls
- deployment of ramps
- bed positioning
- restraining/securing devices
- bed locking devices
- assessing vehicle clearance
- operator position (safety)
- front and rear first loading
- connecting winch to casualty
- winching casualty:
 - steerable
 - non-steerable
- use of skates

7. Describe the loading procedure using a slidebed transporter

Content Detail:

- power take off
- controls
- deployment of slide bed
- bed positioning
- restraining/securing devices
- bed locking devices
- assessing vehicle clearance
- operator position (safety)
- front first and rear first loading
- connecting winch to casualty
- winching casualty:
 - steerable
 - non-steerable
- second/third vehicle lifts:
 - fitting lighting board.

8. Explain the transporting procedure and potential hazards

Content Detail:

- safety checks before moving off
- defensive driving procedures
- pedestrians awareness of recovery vehicles
- other road users awareness of recovery vehicles
- route planning:
 - height
 - weight restrictions
- potential hazards while driving:
 - road camber
 - loading ramps
 - road damage
 - road humps
 - level crossings
 - overall height
- hazardous cargoes.

9. Describe the procedure for unloading the casualty vehicle

Content Detail:

- safety when unloading
 - parking brakes
 - remote winch cable
 - vehicle positioning
 - chocks
- features of unloading
 - fixed bed
 - slidebed
- back winching
- steerable and non-steerable casualty vehicles

VR 16	Winching (Heavy Vehicle Recovery)
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Route: Vehicle Recovery Technician

This module is about recovering heavy vehicles from situations where a winch is required to place the vehicle in a position to be loaded on to a recovery vehicle.

It involves using winches with a working capacity exceeding 8000 lbs.

LEARNING OBJECTIVES

To achieve this module a student has to:

1	Identify the health and safety requirements applicable to the use of winches
2	Identify the types of winch used to recover heavy vehicles
3	Explain winch theory
4	Identify the types of winch ropes used to recover heavy vehicles
5	Identify the ancillary equipment used when winching a heavy vehicle
6	Identify (and calculate) the different resistances to winching when recovering a heavy vehicle
7	Describe the methods used to change direction of pull or increasing the pull of the winch
8	Describe the effect of the casualty's position on the winching operation
9	Describe the methods used to right an overturned heavy vehicle
10	Describe the hand signals used to direct a winch operator

1. Identify the health and safety requirements applicable to the use of winches

Content Detail:

- risk assessment
- handling requirements:
 - manual handling
 - recovery equipment
 - casualty vehicle
- responsibilities:
 - technician
 - legal requirements
 - customer service.

2. Identify the types of winch used to recover heavy vehicles.

Content Detail:

- hydraulic, including:
 - operation
 - controls
 - safety features
- electric, including:
 - operation
 - controls
 - safety features
- mechanical/manual, including:
 - operation
 - controls
 - safety features.

3. Explain winch theory.

Content Detail:

- winch power:
 - mechanical advantage
 - velocity ratio
 - rope layers

- winch rating
 - safe working load
 - minimum
 - maximum
 - leverages
 - rope layers

- matching equipment
 - drum
 - rope
 - sheaths.

4. Identify the types of winch rope used to recover heavy vehicles.

Content Detail:

- strength of a winch
- matching a winch and winch rope
- life of a winch rope
- care of a winch rope
- inspecting a winch rope, including:
 - identification of damage
 - types of damage
- broken wires, including:
 - broken wire allowance
 - dealing with broken wires
- rope construction, including:
 - course laid 7x7
 - g.p. fibre core 6x19
 - extra flexible 6x36
 - rope lay
 - visual inspection
 - rope eyes
 - end fixings
 - hooks
- breaking loads and safe working loads
- test certification.

5. Identify the ancillary equipment used when winching a heavy vehicle.

Content Detail:

- snatch blocks, including:
 - construction
 - types
 - safe working loads

- chains, including:
 - construction
 - types
 - safe working loads

- shackles, including:
 - construction
 - types
 - safe working loads

- scotch blocks, including:
 - use

6. Identify resistances to winching and calculate the effects

Content Detail:

- rolling resistance, including:
 - smooth road, grass, gravel, shingle, sand, mud, soft clay, bog to axle, bog to top of wheel, bog to top of bonnet
 - calculations
- damage resistance, including calculations
- gradient resistance, including calculations
- total resistances, including calculations.

7. Describe the methods used to increase the pull of the winch or change direction of the winch rope

Content Detail:

- doubling the pull of the winch, including calculations
- multiplying the pull of the winch, including:
 - one rope
 - two ropes
 - calculations
- effects of angles on ropes, including calculations
- ground anchors
- dead men.

8. Describe the effects of the casualty's position on the winching operation.

Content Detail:

- winching up a steep slope, including:
 - direction of traffic
 - type of road
 - sequence of operations
 - alternatives

- winching down a steep slope, including:
 - direction of traffic
 - type of road
 - sequence of operations
 - alternatives

- jack-knife vehicles.

9. Describe the methods used to right an overturned heavy vehicle

Content Detail:

- types of vehicle, including:
 - rigid
 - articulated
 - tanker
 - slab side
 - curtain side
 - pcv
- moments, including: fulcrum, effort, force and load
- levers
- centre of gravity, including:
 - homogenous object
 - uneven object
 - combining centres of gravity
- stability
- calculations
- techniques.

10. Describe the hand signals used to direct a winch operator.

Content Detail:

- hand signals:
 - single winch
 - twin winches.

VR 17	Lorry Loaders
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Additional Module

This module is about recovering vehicles using a lorry loader crane from RTC, parking or other situations.

LEARNING OBJECTIVES

To achieve this module a student has to:

1	Identify the health and safety requirements applicable to the use of lorry loaders
2	Identify the components and controls of a lorry loader crane
3	Identify lorry loader load ratings
4	Describe the safety precautions associated with lorry loader operators
5	Identify the ancillary equipment used on a lorry loader for vehicle recovery
6	Describe the pre-operational checks required on a lorry loader
7	Describe the positioning techniques for lorry loaders at the scene of a recovery.
8	Describe the types and use of webbing straps and slings, chains and wire rope slings
9	Describe the slinging techniques used for vehicle recovery on lorry loader cranes
10	Describe the hand signals used for directing lorry loader operators

1. Identify the health and safety requirements applicable to the use of winches

Content Detail:

- risk assessment
- handling requirements:
 - manual handling
 - recovery equipment
 - casualty vehicle
- responsibilities:
 - technician
 - legal requirements
 - customer service.

2. Identify the components and controls of a lorry loader crane

Content Detail:

- components, including
 - purpose
 - operation
 - stabilisers
 - pillar
 - main boom
 - knuckle boom
 - extending boom
 - boom head
- controls, including:
 - identification
 - controls
 - safety features
- operation, including:
 - stabilisers
 - slewing
 - main boom
 - knuckle boom
 - extending boom
 - boom head.

3. Identify lorry loader load ratings

Content Detail:

- load ratings
- proof load certificate
- radius calculations.

4. Describe the safety precautions associated with lorry loader operators

Content Detail:

- risk assessment, including
 - overhead power cables
 - signboards
 - street lamps
 - soft ground
 - manholes
- use of equipment.

5. Identify the ancillary equipment used on a lorry loader for vehicle recovery

Content Detail:

- lifting cradles:
 - different types
 - operation
- clamps and lifting bars.

6. Identify the pre-operational checks required on a lorry loader

Content Detail:

- checks, including
 - vehicle
 - recovery unit
 - test certification
 - loose recovery equipment.

7. Describe the positioning techniques for lorry loaders at the scene of a recovery

Content Detail:

- suitability of lorry loaders
- direction of traffic
- position of casualty
- use of crane.

8. Describe the types and use of webbing straps and slings, chains and wire rope slings

Content Detail:

- webbing straps, including:
 - safe working loads
 - sling modes
 - sling mode correction factor
 - belly straps
 - care of webbing
 - round slings
- chains, including:
 - construction
 - chains in use
 - limits on loading
 - working load limits
 - 1, 2, 3, and 4 leg
- wire rope slings, including:
 - single/double part legs
 - safe working loads
 - 1, 2, 3, and 4 leg slings

9. Describe the slinging techniques used for vehicle recovery on lorry loader cranes

Content Detail:

- belly strops
- roof strops
- lifting cradles, rigging, connection
- wheel clamps/lifting bars
- safety/stability.

10. Describe the hand signals used for directing lorry loader operations

Content Detail:

- mobile crane signals, including:
 - BS5744
 - hand positions
 - arm positions
 - arm directions
- safety of signaller/banksperson

APPENDIX E: - CALIBRATION REQUIREMENTS

Vehicles and equipment should be tested, inspected and certified by accredited Inspection Bodies/registered inspectors in accordance with Lifting Operations and Lifting Equipment Regulations 1998 (LOLER) and other Regulations.
Inspection Bodies shall be accredited by UKAS to ISO 17020/EN45004.

Guidance on the Application of Provision and use of Work Equipment Regulations 1998 (PUWER) and The Lifting Operations and Lifting Equipment Regulations 1998 (LOLER 98) to Motor Vehicle Repair is given in Health and Safety Executive Information Document HSE 803/69 to which reference should be made. The following summary of recommended inspection/thorough examination requirements for equipment used in motor vehicle repair has been taken from HSE 803/69 and should be considered the minimum requirements for compliance with this document.

Work Equipment	LOLER reg. 9 'Thorough examination' (months)	PUWER reg.6 'Inspection' (months)	Comments (related to HSE 803/69 para nos)
Axle stands		12	10
Body aligning jigs	12	12	14
Chain blocks	12		11
Cab/body tilt mechanism		12	19
Cranes: Lorry mounted	12		18
Mobile crane	12		18
Engine hoist	12		11
Engine stands			10
Engine lifting brackets – if used as accessory for lifting	6		16
Eye bolts	6		11
Fork lift trucks	6 or 12		24-27
Fork extensions	6		27
Working platform for FLT	6		27
Gearbox lifting table	12		20
Hydraulic press		12	10
Jacks ; Bottle jacks	12		15
Trolley jacks	12		15
Vehicle equipment	not normally	Not normally	15
Lifting slings ; chain/webbing	6		11
Pallets		No	21
Ramps		12	22
Recovery truck: A-Frame crane	12		22
Jib crane	12		22
Spectacle lift	12		23
Towing dollies		12	23
Rolling road brake tester		12	10
Skips	No	No	21
Stillages	No	No	21
Tail lifts	6		20
Tipper rams		12	19
Tow ropes		6	10
Towing bars		6	10
Vehicle hoists/lifts	6		13

Wheel lifters	12		20
Winch		12	22

HSE 803/69 does not cover all aspects of PUWER and LOLER 98 and further guidance on these Regulations can be found in the associated Approved Codes of Practice (AcoP) L22 and L113

Reference Documents

HSE 803/69 – Guidance on the application of provision and use of Work Equipment Regulations 1998 and the lifting operations and lifting equipment regulations 1998 to motor vehicle repair

L22 Safe use of work equipment: Provision and Use of Work Equipment Regulations 1998 Approved Code of Practice and guidance.

L113: Safe use of lifting equipment: Lifting Operations and Lifting Equipment Regulations 1998 Approved Code of Practice and guidance.

APPENDIX F: CERTIFICATION/INSPECTION BODIES ACCREDITED FOR VEHICLE RECOVERY

When implemented, information on certification bodies accredited against this scheme can be found on the UKAS website www.ukas.com. To identify the certification bodies on the website:

- place the cursor onto 'about accreditation' in top grey menu bar
- move down to 'accredited bodies'
- move across to 'certification body schedules' and left click on this to take you to the list of schedules
- move down past 'key abbreviations' to 'search within the schedules' – click on 'advanced search'
- type 'Highway Sector Scheme No 17' in the box and tick the square by 'search UKAS documents'
- left click 'search'
- this then lists the certification bodies who are accredited and their details can be found by clicking on the appropriate links.

Note: The following Certification Bodies and Inspection Bodies are known to be accredited by UKAS for vehicle recovery against PAS 43:2002

Certification Body	Address	Telephone
BMTRADA	Stocking Lane Hughenden Valley High Wycombe Bucks, HP14 4NR	Tel 01494 565484 Fax 01494 565487
BSI	389 Chiswick High Road London W4 4AL	Tel 0208 996 6431 Fax 0208 996 6452
Consortium for Automotive Registration Services (Quality Assurance) Ltd	CARSQA PO Box 44908 London N9 9RZ	Tel 0208 360 1288
DNVQ Certification B.V	Haastrechtstraat 7 3079 DC Rotterdam Netherlands	Tel 0207 357 6080 Fax 0207 716 6739
Eagle Certification Ltd	Orchard House Brightling Road Robertsbridge E Sussex TN32 5EM	Tel 01580 881215
ICS Registrars	International House 19 Birch Croft Road Sutton Coldfield W Midlands B75 6BP	Tel 0121 241 2299 Fax 0121 241 4623
International Certification Services Ltd	Hillcrest House 16 Hillside Close Paulton	Tel 01761 411109 Fax 01761 411945

	Bristol BS39 7PN	
ISOQAR Ltd	First Floor West Point 501 Chester Road Manchester M16 9HU	Tel 0161 877 6914 Fax 0161 877 6915
Moody International Certification	Salisbury House Stephenson's Way The Wyvern Business Park Derby DE21 6LY	Tel 0870 752 9001 Fax 01332 675020
National Quality Assurance Ltd	Warwick House Houghton Hall Park Houghton Regis Dunstable LU5 5ZX	Tel 01582 539000 Fax 01582 539090
Registrar of Standards (Holdings) Ltd	United House Station Road Cheddar Somerset BS27 3AH	Tel 01934 743999 Fax 01934 744300
TUV UK Quality Assurance Ltd	Surrey House Surrey Street Croydon CR9	Tel 0208 686 3400 Fax 0208 686 3045
Inspection Body	Address	Telephone
Eagle Certification Ltd	Orchard House Brightling Road Robertsbridge E Sussex TN32 5EM	Tel 01580 881215
Recovery Industry Engineering Standards Ltd	1 Bath Street Rugby CV21 3JF	Tel 01788 572 320 Fax 01788 572 320

APPENDIX G: THE ROLE OF THE CERTIFICATION BODY AND AUDITOR QUALIFICATIONS

Scope

The Certification or Inspection Body shall ensure that the field of expertise being assessed meets the requirements of BS EN ISO 9001:2000, PAS 43:2002 and this Sector Scheme Document as appropriate.

1.0 Qualifications of Certification/Inspection Body

1.1 The Certification/Inspection Body shall be accredited by the United Kingdom Accreditation Service (UKAS) or equivalent accreditation body for issuing certificates for product certification systems in accordance with BS EN ISO 9001:2000, PAS 43:2002 and this SSD as appropriate

1.2 The Certification/Inspection Body must be able to demonstrate that it possesses and can maintain the necessary experience and technical competence in vehicle recovery operations.

2.0 Evaluation

The Certification/Inspection Body is responsible for ensuring that the evaluation team which carries out the audit for the Quality System Certificate, possess a demonstrable expertise in vehicle recovery operations. Minimum qualifications for this is that the evaluation team, which may consist of a single individual, should have the following knowledge of vehicle recovery operations and their application to highways construction sites.

- a) IRCA Registered Lead Auditor qualification or equivalent.
- b) knowledge of vehicle recovery operations and their application to highways construction sites.

3.0 The Certification/Inspection Body shall provide to Lantra Awards (Lantra House, NAC, Kenilworth CV8 2LG) and to the Secretary to the VRSSC.

details of registered companies deemed competent to provide vehicle recovery operations at highway construction sites.

details of any newly registered companies within 14 calendar days of registration of such companies.

details of an appropriate competent focal point in their organisation

Additionally, Certification/Inspection Bodies shall immediately notify Lantra Awards and the Secretary to VRSSC when companies are de-registered.

4.0 The product certification system certificate, which shall include reference to this SSD, will be issued to a model, which conforms to the requirements of UKAS and indicates competence under this SSD.

5.0 The Certification/Inspection Body shall present an annual report to the VRSSC, which shall provide an evaluation of the scheme and include as a minimum the following:

- observations on the effectiveness of the current SSD and its scope including any omissions
- recommendations for improving/clarifying this SSD
- feedback on deficiencies against contract documentation

- 6.0 Certification/Inspection Bodies shall attend meetings of the Certification/Inspection Body Group and the Highways Liaison Sector Scheme Committee. Both of these meetings are held at approximately 6 monthly intervals normally on the same day and at same place. In addition, Certification/Inspection Bodies shall comply with the Terms of Reference and Constitution of the Certification Body Group, these will be supplied on request from the Secretary of the Certification Body Group.

APPENDIX H: ORGANIZATION ACCEPTANCE AND GUIDELINES FOR NEW ENTRANTS

- 1.0 Organization Acceptance
 - 1.1 For work carried out on roads managed by the Highways Agency, the National Assembly for Wales, Scottish Executive and DRD (Northern Ireland), only those Organizations holding a valid Certificate of Registration for work within the scope of this SSD will be accepted as complying with Clause 104 and Appendix A of the Specification for Highway Works.
 - 1.2 For work carried out on roads managed by other highway authorities, acceptance of the Organization will depend on the requirements of the contract.
 - 1.3 The Organization is required to notify the Secretary of the Sector Scheme, as detailed in paragraph 4.1 of section 4 of this SSD; the Organization is advised to notify Lantra Awards (Lantra House, NAC, Kenilworth, CV8 2LG) of their registration to this scheme immediately following confirmation from the certification body and thereafter annually. This will allow inclusion of the Organization in the published list of registered Organizations maintained by Lantra Awards. In addition the Organization should provide details of a focal point for the Organization.
- 2.0 Guidelines for New Entrants - Requirements
 - 2.1 Organizations must have the required experienced and qualified Vehicle Recovery Operatives and Technicians and management who meet the requirements of this Sector Scheme. Organizations will need to demonstrate that their vehicles and systems meet the requirements of this Sector Scheme.
 - 2.2 Organizations must have applied for registration with a certification body that is accredited by UKAS to audit against this Sector Scheme. Organizations will have to demonstrate that they have been audited for office based and site based activities.

APPENDIX J1: FEEDBACK

Any observations or complaints relating to this document or the process described herein may either be

a) reported electronically through the Highways Agency's Standards Improvement System (SIS)

or b) addressed to the Committee Secretary using the form below

a) Standards Improvement System (SIS)

SIS is implemented through Highways Agency Standard HD34/03 – The Implementation and Use of Standards Improvement System (DMRB Volume 5 Section 3.1 (DMRB 5.3.1)). HD34 was published in November 2003 followed in December 2003 by the launch of SIS.

SIS is the successor to the Quality Control Reporting System (QCRS) – a paper based system, which relied on designers to complete reports and Highways Agency staff to enter them on an old mainframe computer. The difficulty in entering reports and the fact that QCRS was perceived as a means of only recording defects with an emphasis on redress meant that QCRS had fallen into disuse.

The revised system overcomes both of these shortfalls. SIS is simple to use being available to anyone with Internet Access and is aimed at improving standards rather than reporting defects. It also provides a feedback system to the original author to advise him of the actions being taken. (HD 34/03 can be accessed through the Highways Agency web-site (http://www.highways.gov.uk/business/tech_info.htm) or directly via <http://www.official-documents.co.uk/document/deps/ha/dmr/vol5/section3/hd3403.pdf>)

NOTE: It will be necessary to be authorised to use the system, and in the first instance you are requested to contact Keith Austin (keith.austin@highways.gsi.gov.uk), who will be able to provide assistance in this respect.

b) Feedback form

The Sector Scheme Advisory Committee for Vehicle Recovery
c/o UKAS
21 – 43 High Street
Feltham
Middlesex
TW13 4UN
Tel: 0208 917 8400
Fax: 0208 917 8500

Problem Identified:

Suggested Action:

Name:

Organization:

Address:

Contact details:

Date:

APPENDIX J2: COMPLAINTS TO CERTIFICATION/INSPECTION BODIES

Complaints relating to certification and inspection matters in respect of alleged deficiencies in the product provided under this scheme should in the first instance be taken up with the Organization. In the event that the matter cannot be satisfactorily resolved written complaints should be made to the Organization's certification/inspection body, detailing the problem identified. Contact addresses are given in Appendix F.

Problem Identified:

Organization's Details:

Name:

Address:

Complaints

Name:

Organization:

Address:

Date:

Signed:

APPENDIX K: THE INTERPRETATION OF CERTIFICATES ISSUED BY CERTIFICATION/INSPECTION BODIES

The certification/inspection bodies issue a variety of styles of Certificates of Registration. The scope of registration may be included on the certificate or in an Appendix, it may be a text list or described as a schedule. Other Appendices or addendum are also used to list the Organization's premises included in the certification.

In order for the registration to be valid with respect to this and other Sector Schemes the scope of registration must include specific reference to the Sector Scheme. A list of work activities appropriate to the Specification for Highway Works is not sufficient to indicate compliance. The words 'National Highway Sector Schemes' must be included along with the scheme number. Where possible the scheme title should also be included, e.g. '17 – Sector Scheme for Vehicle Recovery at Highway Construction Sites'.

The following are example models for the certification.

Figure 1 shows the scope of registration for a generic certificate

Figure 2 shows an example of a generic Appendix.

Figure 3 shows the scope of a typical certificate of registration for vehicle recovery at highway construction sites

Figure 4 shows an Appendix to the certificate of registration for vehicle recovery at highway construction sites

Figure 5 shows the scope of a typical inspection certificate of registration for vehicle recovery at highway construction sites

Figure 6 shows an Appendix to the inspection certificate for vehicle recovery at highway construction sites

The italic text in square brackets indicates where specific text would need to be included.

Figure 1 Example Model Certificate of Registration.

[Certification Body Name / Logo]

C E R T I F I C A T E O F R E G I S T R A T I O N

ORGANIZATION NAME]
[Organization Address]
[Town]
[County]
[Post Code]

[Certification Body Name] issues this certificate to the above named company after assessing the company's quality management system and finding it in compliance with

BS EN ISO 9001:2000 AND THE FOLLOWING NATIONAL HIGHWAY SECTOR SCHEMES

For the following scope of registration
[List of appropriate highways related works].
National Highways Sector Schemes
[Sector Scheme number and Title]
[Sector Scheme number and Title]
[Sector Scheme number and Title]

Certificate Number: *[Certificate Number]*
Issue Date *[date]*
Renewal Date *[date]*

Signature

[Name & Title of Certification Body Official]

[Certification Body standard footer: Name / Logo / UKAS Logo/NHSS Logo etc.]

Figure 2 Example Model Appendix

[Certification Body Name / Logo]

APPENDIX

To Certificate Number *[Certificate Number]* Appendix No.*[1]* Page 1 of *[1]*

This Appendix declares the scope of registration of the certificate granted to:

[ORGANIZATION NAME]

[Organization Address]
[Town]
[County]
[Post Code]

Scope of Registration
[List of appropriate highways related activities]
National Highway Sector Schemes
[Sector Scheme Number and Title]
[Sector Scheme Number and Title]
[Sector Scheme Number and Title]

[Certification Body standard footer: Name/ Logo/ UKAS Logo/NHSS Logo etc.]

Figure 3 Example Model Certificate of Registration for vehicle recovery

[Certification Body Name / Logo]

C E R T I F I C A T E O F R E G I S T R A T I O N

[ORGANIZATION NAME]
[Organization Address]
[Town]
[County]
[Post Code]

[Certification Body Name] issues this certificate to the above named company after assessing the company's quality management system and finding it in compliance with
BS EN ISO 9001:2000 AND SECTOR SCHEME 17A

For the following scope of registration
Vehicle removal and recovery operations at highway construction sites for:

- 1. Motor cycle recovery*
- 2. Passenger cars and light commercial vehicles recovery*
- 3. Heavy vehicle recovery*

National Highways Sector Schemes
17A – Sector Scheme for Vehicle Recovery at Highway Construction Sites

Certificate Number: *[Certificate Number]*
Issue Date *[date]*
Renewal Date *[date]*

Signature

[Name & Title of Certification Body Official]

[Certification Body standard footer: Name / Logo / UKAS Logo / NHSS Logo etc.]

Figure 4 Example Model Appendix to Certificate of Registration for vehicle recovery

[Certification Body Name / Logo]

APPENDIX 01

To Certificate Number *[Certificate Number]* Appendix No.*[1]* Page 1 of *[1]*

This Appendix declares the scope of registration of the certificate granted to:

[ORGANIZATION NAME]

[Organization Address]
[Town]
[County]
[Post Code]

Scope of Registration:
Vehicle removal and recovery operations at highway construction sites for:

- 1. Motor cycle recovery*
- 2. Passenger cars and light vehicles recovery*
- 3. Heavy vehicle recovery*

National Highway Sector Schemes
17A – Sector Scheme for Vehicle Recovery at Highway Construction Sites

[Certification Body standard footer: Name/ Logo/ UKAS Logo/NHSS Logo etc.]

Figure 5 Example Model Certificate of Inspection.

[Inspection Body Name / Logo]

C E R T I F I C A T E O F I N S P E C T I O N

[ORGANIZATION NAME]
[Organization Address]
[Town]
[County]
[Post Code]

[Inspection Body Name] issues this certificate to the above named company after assessing the company's quality management system and finding it in compliance with the requirements of

**PAS 43:2002 (incorporating amendment No 1 – March 04) and
SECTOR SCHEME 17A**

For the following scope of registration

The provision of a recovery and roadside repair service for
[Motorcycles]
Passenger cars and light commercial vehicles
Heavy Commercial Vehicles
Buses and Coaches etc]

National Highways Sector Scheme
Sector Scheme 17A – Vehicle Recovery at Highway Construction Sites
Appendix 01 details the vehicles inspected and included with this report

Certificate Number: *[Certificate Number]*
Issue Date *[date]*
Renewal Date *[date]*

Signature

[Name & Title of Inspection Body Official]

(This certificate is valid for twelve months from date of issue only)

[Inspection Body standard footer: Name / Logo / UKAS Logo/NHSS Logo etc.]

Figure 6 Example Model Appendix for Certificate of Inspection

[Inspection Body Name / Logo]

APPENDIX 01

To Inspection Certificate Number *[Certificate Number]* Appendix No. *[1]* Page 1 of *[1]*

This Appendix issued to the undermentioned company declares that the service and vehicles detailed on this Appendix comply with the requirements of PAS 43:2002 (incorporating amendment No 1) – Safe Working of Vehicle Breakdown and Recovery Operators and National Highway Sector Scheme 17A – Vehicle Recovery at Highway Construction Sites.

[ORGANIZATION NAME]

[Organization Address]
[Town]
[County]
[Post Code]

Vehicles Included at this Inspection

Registration No	Make	Model	Body Type

Signature
(Name and Title of Inspection Body Official)

(This certificate is valid for twelve months from date of issue only)

[Inspection Body standard footer: Name/ Logo/ UKAS Logo/NHSS Logo etc.]