## **APPENDIX 2a - EIS SPECIFICATION FOR WORKSTREAM 1 - LIFTING EQUIPMENT**

### Workstream 1 – Lifting Equipment (passenger/goods lifts, stairlifts, cranes)

### 1. Purpose:

- 1.1 To ensure that:
  - a) lifting equipment is of adequate strength and stability for each load, having regard in particular to the stress induced at its mounting or fixing point;
  - b) every part of a load and anything attached to it and used in lifting is of adequate strength;
- 1.2 To ensure that lifting equipment for lifting persons:
  - a) is such as to prevent a person using it being crushed, trapped, or struck or falling from the carrier;
  - b) is such to prevent so far as is reasonably practicable a person using it, while carrying out activities from the carrier, being crushed, trapped, or struck or falling from the carrier;
  - c) has suitable devices to prevent the risk of a carrier falling;
  - d) is such that a person trapped in any carrier is not thereby exposed to danger and can be freed.

### 2. Scope:

2.1 This workstream covers inspections in respect of:

Lifting equipment used or intended to be used for lifting and lowering loads and includes its attachments used for anchoring, fixing, or supporting it, as described in:

The Lifting Operations and Lifting Equipment Regulations 1998 (LOLER)

- a) Health and Safety at Work Act 1974
- b) Supply of Machinery (Safety) Regulations 1992(2)
- c) Lifts Regulation 1997(4)
- d) Provision and Use of Work Equipment Regulations 1998(5)
- 2.2 Types of lifting equipment included but not limited to:

## Lifting equipment

- e) Dock Levellers
- f) Excavators and loading shovels
- g) Forklift truck
- h) Lifting appliances
- i) Lifting machines
- j) Lorry mounted cranes
- k) Motor vehicle lifting tables
- I) Pallet truck

## Lifts

- m) Passenger lifts (all types)
- n) Escalators
- o) Travellators
- p) Goods lifts
- q) Lift accessories
- r) Window cleaning and building maintenance equipment
- s) Ceiling track hoists

# Cranes

- t) Mobile cranes
- u) Loader crane
- v) Overhead travelling cranes
- w) Tower crane

# 3. Thorough examination, inspection and testing of lifting equipment

- 3.1 The competent person shall carry out thorough examination, and testing of lifting equipment, where appropriate, to ascertain and/or identify:
  - a) whether the lifting equipment would be safe to operate;
  - b) any defect which is or could become a danger to a person;
  - c) any repair, renewal or alteration required to remedy a defect found to be a danger to persons;
  - d) any defect which is not yet but could become a danger to persons:
    - (i) the time by which it could become such danger;
    - (ii) any repair, renewal or alteration required to remedy it;
  - e) in the case of lifting equipment after installation or after assembly at a new site or in a new location:
    - (i) that it has been correctly installed and would be safe to operate.

# 2 Frequency of thorough examination, inspection, and testing

- 3.1 To ensure health and safety conditions are maintained and that any deterioration can be detected and remedied in good time, frequent examination, inspection, and testing of lifting equipment is required to be carried out by a competent person:
  - a) in the case of lifting equipment for lifting persons or an accessory for lifting, at least every 6 months;
  - b) in the case of other lifting equipment, at least every 12 months;
  - c) in either case, in accordance with an examination scheme; and
  - d) each time that exceptional circumstances which are liable to jeopardise the safety of the lifting equipment have occurred; and

e) if appropriate for the purpose, is inspected by a competent person at suitable intervals between thorough examinations.

## 4. Additional Service (Optional Pricing) – Inspection on installation

- 4.1 Where the safety of lifting equipment depends on the installation conditions, the competent person is required to carry out a thorough examination:
  - a) after installation and before being put into service for the first time; and
  - b) after assembly and before being put into service at a new site or in a new location,

to ensure that it has been installed correctly and is safe to operate.

## 5. Reports and defects

- 5.1 The competent person making a thorough examination for an employer shall:
  - a) notify the employer forthwith of any defect in the lifting equipment which in their opinion is or could become a danger to persons;
  - b) as soon as is practicable make a report of the thorough examination in writing authenticated by the competent person or on their behalf by signature or equally secure means and containing the information specified in Annex A, and in the format requested to:
    - (i) the employer; and
    - (ii) any person from whom the lifting equipment has been hired or leased;
- 3.1 Where in the competent person's opinion, a defect in the lifting equipment involving an existing or imminent risk of serious personal injury, send a copy of the report as soon as is practicable to the relevant enforcing authority<sup>1</sup>.
- 3.2 The competent person making an inspection for an employer shall:
  - a) notify the employer forthwith of any defect in the lifting equipment which, in the competent person's opinion, is or could become a danger to persons;
  - b) as soon as is practicable make a record of the inspection in writing.

<sup>&</sup>lt;sup>1</sup> "relevant enforcing authority" means a) where the defective lifting equipment has been hired or leased by the employer, the Health and Safety Executive; b) otherwise, the enforcing authority for the premises in which the defective lifting equipment was thorough examined.

### Annex A

### Information to be contained in a report of thorough examination of lifting equipment

The competent person shall prepare the report in the format requested in the call-off requirements and shall include:

- 1. The name and address of the employer for whom the thorough examination was made.
- 2. The address of the premises at which the thorough examination was made.
- 3. Particulars sufficient to identify the lifting equipment including, where known, its date of manufacture.
- 4. The date of the last thorough examination.
- 5. The safe working load of the lifting equipment or (where its safe working load depends on the configuration of the lifting equipment) its safe working load for the last configuration in which it was thoroughly examined.
- 6. In relation to the first thorough examination of lifting examination after installation or after assembly at a new site or in a new location:
  - (a) That it is such thorough examination;
  - (b) (if such be the case) that it has been installed correctly and would be safe to operate.
- 7. In relation to a thorough examination of lifting equipment, (other than a thorough examination following installation or after assembly at a new site or in a new location):
  - (a) Whether it is a thorough examination:
    - (i) Within an interval of 6 months;
    - (ii) Within an interval of 12 months;
    - (iii) In accordance with an examination scheme;
    - (iv) After the occurrence of exceptional circumstances;
  - (b) (if such be the case) that the lifting equipment would be safe to operate.
- 8. In relation to every thorough examination of lifting equipment:
  - (a) Identification of any part found to have a defect which is or could become a danger to persons, and a description of the defect;
  - (b) Particulars of any repair, renewal or alteration required to remedy a defect found to be a danger to persons;
  - (c) In the case of a defect which is not yet but could become a danger to persons:
    - (i) The time by which it could become such danger;
    - (ii) Particulars of any repair, renewal or alteration required to remedy it;
  - (d) The latest date by which the next thorough examination must be carried out;
  - (e) Where the thorough examination included testing, particulars of any test;
  - (f) The date of the thorough examination.
- 9. The name, address and qualifications of the person making the report; that he is self-employed or, if employed, the name and address of their employer.
- 10. The name and address of a person signing or authenticating the report on behalf of its author.
- 11. The date of the report.

## ANNEX B

### Competence

### **Qualifications and Experience**

A competent person should, as a minimum stipulation, be qualified in their practising profession.

- Minimum NVQ3, HNC or equivalent lift or mechanical engineering qualification (or EITB/C&G J modules); and
- Minimum three to five years' relevant industry experience working with lifts, escalators, moving walkways, goods lift and stair lifts etc;
- ISO/IEC 1720:2012 (Type A and Type C Bodies only)<sup>2</sup> Accreditation Certificate issued by an accreditation body;
- Hold (or currently be working towards) minimum qualifications in Mechanical Engineering HND / HNC / Full Technological Certificate, relevant to the Lift and Crane Industry;
- possess demonstrable competence in the safe operation of all lift equipment, in accordance with BS 7255;
- have a background in working with lifts and/or crane equipment;
- hands on experience of working in a role such as manufacturing / repair / maintenance.

**Partner or Director** (Chartered Engineer) should hold appropriate qualifications/accreditations and have at least 10 years relevant post-professional qualification experience.

**Senior Professional** (Chartered Engineer) should hold appropriate qualifications/accreditations and have at least 5 years relevant post-professional qualification experience

**Professional** (Incorporated Engineer) should be a professionally qualified/accredited consultant, hold one of the following qualifications and have at least 3 years relevant post-professional qualification experience

**Senior Technician** (Engineering Technician) should be a graduate on a recognised and accredited course for obtaining a professional qualification

Technician (Engineering Technician) should be a graduate on a recognised accredited course

### Admin/Junior Technician/Apprentice

- Administration staff;
- Junior Technician (i.e. Trainee / Undergraduate)

• Engineering Inspection (including Pressure Systems, lifting equipment/Hoists, electrical installations, power presses, local exhaust ventilation, cargo / pre-shipment inspection, manufacture of boilers / pressure vessels, welding inspections, oil and gas metering)

Accredited inspection bodies are classified into three types based on the inspection body's relationship to the parties involved, its organisation structure, and its responsibilities and ownership:

Type A bodies provide third party services.

**Type B** bodies are separate and identifiable entities and can only provide inspections to its parent company.

**Type C** bodies are identifiable entities but may not be a separate part of the organisation. Type C can also supply inspection services to parties other than the parent organisation.

<sup>&</sup>lt;sup>2</sup> Accreditation to organisations performing various types of inspection, surveys, and risk assessments:

• Apprentice with Apprenticeship entry qualifications.

## **Chartered Engineer**

Must have experience in developing solutions to engineering problems using new or existing technologies, through innovation, creativity and change and/or they may have technical accountability for complex systems with significant levels of risk.

- Use a combination of general and specialist knowledge and understanding to optimise the application of existing and emerging technology
- Apply appropriate theoretical and practical methods to the analysis and solution of engineering problems
- Provide technical and commercial leadership
- Demonstrate effective interpersonal skills
- Demonstrate a personal commitment to professional standards

## **Incorporated Engineers**

Must have experience in maintaining and managing applications of current and developing technology, and can undertake engineering design, development, manufacture, construction, and operation and must be able to demonstrate:

- Use a combination of general and specialist engineering knowledge and understanding to optimise the application of existing and emerging technology
- Apply appropriate theoretical and practical methods to design, develop, manufacture, construct, commission, operate, maintain, decommission and re-cycle engineering processes, systems, services, and products
- Provide technical and commercial management
- Demonstrate a personal commitment to professional standards

# **Engineering Technicians**

Must be able to apply safe systems of work and must be able to:

- Use engineering knowledge and understanding to apply technical and practical skills.
- Contribute to either the design, development, manufacture, commissioning, decommissioning, operation or maintenance of products, equipment, processes, or services.
- Accept and exercise personal responsibility.
- Use effective communication and interpersonal skills.
- Comply with the Code of Conduct of your institution
- Exercise responsibilities in an ethical manner.

## **Codes of Conduct**

- Act with due skill, care, and diligence and with proper regard for professional standards
- Prevent avoidable danger to health or safety
- Act in accordance with the principles of sustainability, and prevent avoidable adverse impact on the environment and society
- Maintain and enhance their competence, undertake only professional tasks for which they are competent, and disclose relevant limitations of competence

- Accept appropriate responsibility for work carried out under their supervision
- Treat all persons fairly and with respect
- Encourage others to advance their learning and competence
- Avoid where possible real or perceived conflict of interest, and advice affected parties when such conflicts arise
- Observe proper duties of confidentiality owed to appropriate parties
- Reject bribery and all forms of corrupt behaviour and make positive efforts to ensure others do likewise.
- Raise a concern about a danger, risk, malpractice or wrongdoing which affects others ('blow the whistle'), and support a colleague or any other person to whom you have a duty of care who in good faith raises any such concern
- Assess and manage relevant risks and communicate these appropriately
- Assess relevant liability, and hold appropriate professional indemnity insurance
- Notify your institution (if a member) of any significant violation of the Institution's Code of Conduct by another member.

### Risk

Identifying, assessing, managing, and communicating risk

- Apply professional and responsible judgement and take a leadership role
- Adopt a systematic and holistic approach to risk identification, assessment, and management
- Comply with legislation and codes, but be prepared to seek further improvements
- Ensure good communication with the others involved
- Ensure that lasting systems for oversight and scrutiny are in place
- Contribute to public awareness of risk

## Sustainability

- Contribute to building a sustainable society, present and future
- Apply professional and responsible judgement and take a leadership role
- Do more than just comply with legislation and codes
- Use resources efficiently and effectively
- Seek multiple views to solve sustainability challenges
- Manage risk to minimise adverse impact to people or the environment

### ANNEX C

### **Definitions**:

"accessory for lifting" means work equipment for attaching loads to machinery for lifting

"accreditation certificate" means a certificate, issued by the United Kingdom Accreditation Service or a national accreditation body in the European Union, attesting that a conformity assessment body meets the notified body requirements

"authorised representative" means a person appointed by written mandate by an installer or manufacturer as their authorised representative to perform specified tasks on the installer or the manufacturer's behalf

"carrier" means the part of a lift by which persons or goods are supported in order to be lifted or lowered

"competent national authority" means an authority having responsibility for enforcing the law

"competent person" as described in Annex B

"conformity assessment" means the process demonstrating whether the essential health and safety requirements relating to a lift or a safety component for lifts have been fulfilled

"conformity assessment body" means a person that performs conformity assessment activities, including calibration, testing, certification, and inspection

"client" means the authority entering into a call-off contract with the provider

"distributor" means a person in the supply chain, other than the manufacturer or the importer, who makes a safety component for lifts available on the market

"**employer**" means owner of the lifting equipment; and/or the individual responsible for the premises in which the lifting equipment is located.

"essential requirements" means designed and constructed in compliance with any essential requirements, that is to say requirements relating to its design or construction in any of the instruments which give directives concerning the safety of products).

"examination scheme" means a suitable scheme drawn up by a competent person for such thorough examinations of lifting equipment at such intervals as may be appropriate for lifting equipment which is exposed to conditions causing deterioration which is liable to result in dangerous situations.

"installer" means a person who takes responsibility for the design, manufacture, installation and placed on the market of a lift

"Lift" means a lifting appliance

- (a) Serving specific levels
- (b) Having a carrier moving along guides which are rigid and inclined at an angle of more than 15 degrees to the horizontal, or along a fixed course even where it does not move along rigid guides, and
- (c) Intended for the transport of
  - (i) Persons
  - (ii) Persons and goods, or
  - (iii) Goods alone, if the carrier is accessible, that is to say a person may enter it without difficulty, and fitted with controls situated inside the carrier or within reach of a person inside the carrier;

*"lifting equipment"* means work equipment for lifting or lowering loads and includes it attachments used for anchoring, fixing or support it.

"Lifting operation" means an operation concerned with the lifting and lowering of a load.

"load" includes a person

"risk" means a risk to the health and safety of persons and, where appropriate, to the safety of property

*"thorough examination"* in relation to a thorough examination:

- (a) means a thorough examination by a competent person;
- b) where it is appropriate to carry out testing, described below, includes such testing by a competent person as is appropriate for the purpose,

and "thoroughly examined" shall be construed accordingly

"work equipment" means any machinery, appliance, apparatus, tool, or installation for use at work (whether exclusively or not).