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Portland Inn Dilapidation Report

2nd May 2018

**Specification of upgrading**

**Stoke on Trent City Council**

**Housing & Public Buildings**

**Lift Communication Upgrades**

July 2019

**Requirements**

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| Stoke on Trent City Council Public Buildings |  |
| **Specification of Upgrade requirements** | |

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| **Procedure title :** | Upgrading, testing and certificating lift communication devices |

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| **No :** | LU01 | **Issue date** | July 2019 |

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| **Scope** |

* To carry out an upgrade to various Stoke-on-Trent City Council lifts to comply with EN81-28:2018

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| **Standards** |

Basic requirement

* Installation of Memco EcoSystem (including Avire sim) Gold Package (or equivalent with ability to connect to the current Avire hub) to various multi-level lifts.
* Installation of Memco EcoSystem (including Avire sim) Bronze Package (or equivalent with ability to connect to the current Avire hub) to various Platform lifts.
* Carry out Health & Safety assessment to ensure each lifts safety prior to putting back into use.
* Ensure correct operation of lifts including any lighting, auto controllers, timers etc. and report any problems to the contract administrator from site

Frequency

* Various lifts will be added to an initial package, with others being added as required. The number of sites on the pricing document does not guarantee all sites will be completed, and your costings should not be based on all sites being completed.

Full Specification

Installation must include all cabling, testing, and ensuring stable connection to Stoke-on-Trent City Council Avire Memco Hub and call centre and designated lift contractor.

This work is intended to modify the communication and lift monitoring to ensure the lift fully complies with EN81 part 28 and all safeguards on the autodial units as follows:

* Anti-vandal characteristics – the autodial unit shall not operate if the lift is fully operational i.e. moving or stationary at a landing with doors freely moving
* Autodial shall work on breakdown only. The alarm filtering to automatically be by-passed when the push has been activated longer than 30 seconds
* Autodial call point shall be in the pit, on top of the car and in the car, THREE places.
* The autodial unit shall detect answer phones and continue with call sequence until successful connection with entrapped person/human assistance.
* The autodial unit shall have battery backup. The battery back-up must support a one hour function and enable a 15 minute voice communication period
* The autodial unit needs to be programmed to call a 24/7 call receiving centre, it can however call a number of lines during occupied work hours for assistance prior to this. The contractor shall allow for additional time at each site within the quotation to discuss and co-ordinate the dialling sequence with the responsible people on site. The Contractor shall upload the numbers and dialling sequence with the auto dial manufacturer, test and commission.
* The type of autodial unit shall be GSM with fully roaming sim card, capable of operating on the strongest cellular (mobile telephone) signal. Under no circumstances shall any of the new auto dial units be installed that is locked in contract with only one telephone network.
* GSM digital cellular network (Mobile phone) provides a more robust communication link, omits lines being unplugged, cable damage, unauthorised cancelation of lines. Analogue lines are due to be discontinued by 2025 earlier by BT, so this system future proofs the communication link and minimises the number of future upgrades.
* The contractor shall make a thorough survey of the site and test the cellular signal strength to ensure the location of the auto dial transmitter is in the optimum position for signal strength and communication. More importantly the auto dialler shall not lose cellular connection, if after the site survey even the optimum position is vulnerable to loss of connectivity, the Client must be informed at the earliest opportunity to make alternative arrangements.
* The lift motor room shall be provided with means of communication to the point of entrapment i.e. the pit, on top of the car and in the car. This shall ensure the Lift Engineer is able to communicate with the entrapped persons and explain what is happening to reassure the person or persons in the lift.

Bronze Package

Digital 2G Communication Platform with RS-232

The Digital Communication Platform (DCP) is the brain of the Avire Ecosystem, system that provides an EN81-28 compliant emergency telephone, digital CANBus, data gateway, and M2M link in one unit.

* The DCP allows customers to fit a single unit in the machine room, or MRL cabinet, from which all configuration can be carried out.
* The digital audio bus (used to connect the Digital Audio Units to the DCP) is less susceptible to noise in the travelling flex, so time spent on finding suitable wires in the travelling flex and fault finding on noise related issues, is reduced.
* The DCP provides a cost saving and more reliable solution versus traditional PSTN or GSM line.
* The M2M capability allows the connection of remotely configurable devices and the extraction of lift monitoring data; typically, only achievable via the installation of a new lift controller.

Multi-Network Full Roaming SIM card (3 year)

The Avire SIM card allows GSM/ GPRS Voice and Data units to connect to multiple network providers to guarantee emergency communication. The SIM card provided for installation is be capable of:

* Connecting device to multiple providers and networks, choosing the strongest signal available.
* Guaranteed 2-way emergency communication by reconnecting to stronger networks when signal reduces.
* Compatibility with DTMF tone, leading to analogue phones completing background calls and being compliant.
* Sending an alert in case if the SIM card is seen to regularly use a large amount of their allowance.

Digital Audio Module – behind COP version

The Digital Audio Module is EN81-28 and EN81-70 compliant solution that provides 2-way communication between entrapped passengers and rescue service. The Digital Audio Module is mounted behind COP and capable of:

* Reducing time and effort for installation, as only 2-wires inside the travelling flex are required.
* Transmitting high digital audio quality over 400m cables.
* Using the integrated battery back-up in case of power failure.
* Supporting CAN & LPBus connections.

Avire Hub Access

The Avire Hub is a cloud-based monitoring platform which provides the user interface to all connected Avire products in the elevator. Avire's Hub solution is capable of:

* Accessing information, using a secure cloud-based platform, from any web-enabled device without need for extra software/hardware. This means an “on-the-go” access to all Avire connected devices.
* Remotely configuring all connected devices using data packets over the cellular network.
* Assisting in implementation of updates and new features to all connected devices (capable of receiving updates) to ensure that the latest functionality is available on connected devices.
* The set up will be provided to Unitas system with full Admin rights, and the successful installation company with read only rights.

Gold Package

Additional products to Bronze Package

Lift HAWK remote elevator monitor

The Lift HAWK is a sensor fitted at the top of the car that is connected to COP lift buttons and Digital Communication Platform (DCP). Through these links a test can be initiated remotely to check the movement capability of the elevator. The use of the DCP allows a test to be triggered remotely from the Avire Hub and for live status updates to be received from the lift directly into the Hub.

The remote elevator monitor is be capable of:

* Quickly verifying that an elevator is genuinely out of service.
* Learning the pattern of lift usage and performing a test in case of unusual behaviour.
* Gain information on the lift status without connecting to the lift controller.
* Allow tests to be programmed and actioned remotely from the DCP with results supplied to the Avire Hub.

Pit Phone

The Pit Phone is EN81-28 and EN81-20 compliant solution that provides 2-way communication in case if someone is entrapped in the pit refuge area. The Pit Phone is a static phone that is mounted in/near the pit refuge space and has similar capabilities to the Digital Audio Module:

* Transmitting high digital audio quality over 400m cables.
* Using the integrated battery back-up in case of power failure.
* Supporting CANBus connection.

Triphony Unit

The Triphony Unit is EN81-28 and EN81-20 compliant solution that provides 2-way communication in case of entrapment. The Triphony Unit is a static phone that is mounted on top of the car/ at any point around the car with potential entrapment and has similar capabilities to the Digital Audio Module:

* Transmitting high digital audio quality over 400m cables.
* Supporting CAN/ LPBus connection.

Connected Panachrome+ Safety Edges

The Panachrome+ is a lift safety detection unit, offering maximum passenger safety and minimising the possibility of door damage. The Panachrome+ provides:

* High visibility of doors with a clear indication when doors are about to close.
* Safest possible product, that exceeds legislative requirements.
* Bespoke look that will fit in any building.
* Quick and easy installation.

Accessories:

* Connected Panachrome+ Control Box
* Motor Room Handset

Supporting subject specific legislation

* Electricity at Work Regulations 1989
* Health and safety at work act 1974
* BS EN 81 – 28
* BS EN 81 – 70
* BS 7255

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| **Documentation** |

Certification required

* Certificate - Full System Test and compliance
* Engineers written confirmation of works sheet
* O & M Information for installation

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| **Remedial Works** |

**Remedial requirements**

* Items Identified during installation must be clearly highlighted and notified to the site responsible person / contract administrator. A signed confirmation shall be required.
* Any site at risk due to defective or insecure equipment shall be reported to the contract officer prior to leaving site.

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| **Supporting subject specific legislation/ Standards** |

Where an appropriate British or equivalent European Standard Specification or Code of Practice issued by any national Standards Institution or other equivalent is current, all construction operations, goods used or supplied shall, as a minimum requirement, be in accordance with that Standard or Code of Practice, without prejudice to any higher standard required by the Contract.

The workmanship is to be of the best quality in accordance with the current BS and EU Code of Practice where such exists appropriate to the works.

All components, goods and materials requiring replacement as part of maintenance or repairs should match those originally fitted and so far as possible shall be obtained from the original supplier.

Every element of workmanship shall be carried out in strict accordance with the current British codes of practice, BS8000 “Workmanship on building sites”, European standards and good building practice at all times.

All workmanship shall be carried out in order of priority of the project and run in a sequential route agreed by the client. Works should be carried out in an efficient, logical, methodical and cost effective manner.

The following list refers to standards, specifications, recommended procedures, & output quality.

This list is by no means exhaustive. Notwithstanding the standards referred to hereunder, the Contractor will ensure full compliance with all relevant standards & codes

**The Building Regulations 2010**

Approved Document Regulation 7: Materials and workmanship.

Approved Document B (fire safety) volume 2: buildings other than dwelling houses (2006 edition incorporating the 2010 and 2013 amendments)

Approved Document C - Site preparation and resistance to contaminates and moisture

Approved Document M: Volume 2 – Access and use of buildings other than dwellings

**Publicly available specifications**

* PAS 7:2013. Fire risk management system. Specification.
* PAS 79:2012. Fire Risk Assessment. Guidance and a recommended methodology.
* PAS 8812:2016. Temporary works. Application of European Standards in design. Guide.

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| **General Matters** |

001 This section shall apply to all subsequent sections herein and to the Schedule of Rates.

002 Where these Specifications contain reference to preferred particular brands/models etc. of materials, goods and equipment and the Service Provider must make every effort to ensure that as far as such materials, goods and equipment are procurable they are incorporated within the works.

003 All workmanship and materials to be used in the Contract are to be the best of their respective kinds and where a BS, Specification or Code of Practice is applicable, whether specifically noted or not, this shall be taken to denote the minimum acceptable standard of material or workmanship.

004 All workmanship and materials shall comply with the requirements of the latest appropriate Standard.

005 Where any reference is made in the Specification to a British Standard (BS) or Code of Practice (CP) this is deemed to include any subsequent revision, amendment, re-enactment and/or replacement thereof, such that the Service Provider shall fully comply with all the latest BS, CP and the like current at the date of execution of the Work to be undertaken.

006 It is a requirement that all work shall be carried out in accordance with the best possible building practice and methods.

007 BRITISH STANDARD PRODUCTS: Where any product is specified to comply with a British Standard, it may be substituted at the Client Representative’s discretion by a product complying with a grade or category within a European Community Standard or other international standard recognised in the UK specifying equivalent requirements and assurances in respect of material, safety, reliability, fitness for purpose and, where relevant, appearance. Where the term Standard is used this shall be construed to mean individually or collectively, as appropriate, any British or European Community Standard and/or Code of Practice etc.

008 OR EQUIVALENT APPROVED means that products of different manufacture may be substituted if prior approval of the Client Representative has been obtained.

009 The Client Representative's decision on the use and continued approval of alternative materials goods and equipment is final.

010 All such alternative goods, materials and equipment that are approved for use in the works shall be provided at no extra cost to the contract.

011 All goods and materials shall be used, fixed or applied as appropriate strictly in accordance with the manufacturer’s recommendations, directions or instructions.

012 Wherever possible all materials to be incorporated in the Works shall be such that it is compatible with and shall aesthetically match existing material with which it is to replace or repair.

013 All existing lines and levels are to be maintained at all times and new work shall be carried through to the same lines and levels unless otherwise directed by the Client Representative.

014 It should be noted that these Specifications are deemed to apply in whole or in part, as relevant, to each of the Schedule of Rates Sections to the extent determined by each individual Schedule of Rates item. Specifications across a number of trades may be relevant to each Schedule of Rates item and the Service Provider is deemed to have full knowledge of and shall comply with all Specifications relating to the work to be undertaken.

015 'Approved', 'directed', 'selected' and similar expressions shall relate to the Client Representative whose decisions shall be final.

016 Where items are described as "Renew" this shall mean taking or cutting out old, supplying and fixing new item to match existing, including all fitting in, piecing out and any other preparatory work. Items shall be renewed on a like for like basis subject to Clause 003 to 010 above and unless otherwise described in the Schedule of Rates or as directed by the Client Representative.

017 Where items are described as "fix" or "install" or "lay" these shall mean supplying and fixing by the Service Provider of new items, materials, or things including any preparatory work.

018 Where items are described as "fix only" this shall mean the fixing of materials supplied free of charge by the Client which are to be incorporated in renewal items of work or new installations.

019 Manufactured items referred to in the Schedule of Rates shall unless specified to the contrary mean manufacturer's standard products.

020 Descriptions in the Schedule of Rates may have minor inconsistencies in terminology between relative items and also between the three levels of Description for each item contained within the Contract Documents. This is due to the computer field size limitations and Works Order application of the Client's computer system. Where the context requires, minor omissions of text should not be taken to mean that work in connection with a particular repair and maintenance item in the Schedule of Rates can be left incomplete.

021 The Service Provider should note that there are three levels of Description relative to each Schedule of Rates item and the Service Provider should refer to each of these, in particular, the Long Description, to ascertain the scope of work envisaged.

022 Each item in the Schedule of Rates is intended to represent the entire work content of the particular repair and or maintenance in respect of the subject of the Schedule of Rates item and the Service Provider is deemed to have included in his Percentage addition/deduction for all ancillary items not specifically referred to in the Schedule of Rates item but are necessary to achieve the particular repair or maintenance of the Schedule of Rates subject.

023 Any reference made to rates, price or prices in the Specification shall mean the prices contained in the Schedule of Rates together with the Service Provider's Percentage addition/deduction thereto and are deemed to include for everything described herein.

024 Where reference is made within the Schedule of Rates to an area defined as a "patch" this shall be deemed to refer to a net area of ne 1.00sm, unless described otherwise.

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| **Workmanship** |

GENERAL MATTERS

The contractor is to include in his rates for all preambles noted hereunder particularly where measured items are not included later in the documentation

All materials, workmanship and installation methods shall comply with current and relevant Building Regulations along with British and European Standards.

Pay particular attention to Building Regulations Approved Document 7, Regulation 7 2013.

It is the responsibility of the contractor to acquaint themselves with all relevant codes of practice referred to within the specification and to familiarise themselves with all aspects of the work whether explicitly referred to not.

The contractor must familiarise themselves with the site in order to fully appreciate the means of access, facilities for the storage of plant & materials etc. and, be satisfied with all site conditions prior to commencement.

Any works required outside of the specification should be brought to the attention of the client at the earliest opportunity.

In all circumstances guidance provided by the Health and Safety Executive will be strictly adhered to; including, but not limited to the removal and disposal of asbestos containing materials.

For completeness and accuracy all measurements provided are to be checked by the contractor. Any measurements and specification queries should be raised at the earliest opportunity and pre construction stage.

All prices must be inclusive of cutting, marking, health & safety processes, hazard and waste removal, making good and any other related works required to successfully complete each task to the satisfaction of the client.

Temporary removal or replacement of household items and equipment, setting out and cutting of holes, chases etc., lifting and replacing floorboards, traps etc. and making good the fabric of the building for all elements of work must be also included.

Prior to commencement the contractor is to locate, temporarily protect, and/or disconnect as required, any services or utilities affected by works specified. The contractor must ensure subsequent reconnection of the said services upon completion ensuring minimal disturbance to the occupants, with no services being decommissioned overnight unless otherwise agreed with the client.

The buildings may be occupied for the duration of the works and the contractor will be required to carry out the work in such a manner as to cause minimum disturbance to the public use of the properties, avoiding damage to goods, moving and replacing furniture and restitution of any damage caused by their workforce.

The contractor is responsible for ensuring that all finished works are suitably protected from damage during subsequent operations. Any damage that occurs through failure to protect completed works must be rectified at the contractor’s expense, to the agreed specification.

Corridors and entrance doors are to be strictly well maintained and clutter free.