Electric Vehicle Home and Workplace Smart Charge Points

Recommended Technical Specification
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Appendix 1: Technical schedule
1 Overview

In 2007 road transport in Northern Ireland (NI) accounted for 22% of all greenhouse gas emissions and 29% of CO2 emissions. In its Programme for Government the NI Executive has set a cross-departmental target of a 25% reduction in greenhouse gas emissions on 1990 levels by 2025, and an additional target for 12% of Northern Ireland’s electricity to come from renewable sources by 2012. A part of the strategy to achieve these challenging targets would be to support low carbon transport which includes promoting the use of electric vehicles (EVs).

In October 2011, DRD and DoE jointly led a consortium of public and private organisations, including representatives from local government, and submitted the NI bid in the Second Wave of the Plugged-in-Places scheme. The scheme, supported by Government and managed through the Office of Low Emission Vehicles (OLEV), looks to offer match-funding to local consortia of businesses and public sector partners for the installation of public electric vehicle Charge Points across the country to stimulate uptake of plug-in electric vehicles. In December 2011, NI together with four other schemes, successfully became a member of the Plugged-in-Places scheme amidst stiff competition from many other proposals from different regions around the UK.

The purpose of this document is to establish the minimum technical specification for the home and workplace smart Charge Points as part of the suppliers turnkey offering which will include provision, installation and maintenance of the Charge Point and remote data provision on a quarterly basis.

2 Scope

This technical specification covers the supply and installation and maintenance of Charge Points for Electric Vehicles (EVs) for home and workplace premises. The warranty/maintenance period shall be for a maximum period of 5 years until 31 March 2016. The units must offer the capability to remotely provide data to the ecar Project and OLEV on a quarterly basis from the date of installation until 31st March 2016.

_____________________________ (Insert Number of Charge Points) charge point unit is to be installed at each of the following locations;

___________________________________________________________________________

___________________________________________________________________________

______________________________________________________ (Buyer to Insert Location)

It is also recommended that the buyer prepares a map of the charge point location and distance to the nearest distribution board.
3 Assessment Criteria

The ability to meet the specification requirements for the supply, delivery, installation of charge point, with required smart data provision (as outlined in section 4.2) is mandatory.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Weighting %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price including cost competitiveness and value for money.</td>
<td>100%</td>
</tr>
</tbody>
</table>

4 Specification of Requirement

This section is divided into the following sub-sections:
4.1. Technical Requirements of Charge Points
4.2. Data Management Requirements
4.3. Other General Requirements

The Supplier is required to supply Charge Points that meet all the requirements as outlined within this section.

4.1 Technical requirements of Home and Workplace Charge Points

4.1.1 Overview

The equipment covered in this specification is for Charge Points suitable for charging electric vehicles (EVs) located in home and workplace premises. The Charge Points will likely be connected to a single phase AC electricity supply at 230V phase to neutral voltage and must be capable of supplying up to 16A, single phase charge to a suitable EV.

The Charge Points shall be capable of charging electric cars that conform to the Control Pilot Function as described in IEC 61851-1 Edition 2 (mode 3) and SAEJ1772. The Charge Point shall be supplied with the charging cable attached and the vehicle connector (side of the charging cable that attaches to the vehicle’s charging inlet) must conform to the dimensions as set out in SAE J1772.

Suppliers must have carried out a validation process with their Home Charge Point or other similar products along with EV manufacturers, including Nissan, Renault and Mitsubishi prior to Charge Points issued to the User. Evidence of this validation must be provided with your return documentation.
Full Renault EV Ready certification, without any exemptions is highly desirable. If this has been achieved, evidence should be supplied. **Any exemptions from EV ready certification must be clearly stated in the Supplier’s submission.**

Charge Points should support **timer functionality** to allow the User to defer the charging session and include a **Measuring Instruments Directive (MID) meter.**

To meet OLEV’s requirement for data reporting on User EV charging behaviour, the Supplier is required to **host a service that will collect required data on every charging session from the Charge Points and deliver the data in an appropriate format to the ecar Project and OLEV at required quarterly reporting intervals.** This data reporting is required until 31\textsuperscript{st} March 2016.

### 4.1.2 Electro-mechanical configuration of Charge Points

#### 4.1.2.1 Electrical supply

The Charge Points shall be connected to a single phase AC electricity supply at 230V phase to neutral voltage and capable of supplying up to 16A, single phase charge to a suitable EV.

#### 4.1.2.2 Network parameters

The equipment shall be suitable for installation on electricity networks with the design parameters outlined in Table 1 below:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated Voltage</td>
<td>230V</td>
</tr>
<tr>
<td>No. of Phases</td>
<td>Single or three phase</td>
</tr>
<tr>
<td>Frequency</td>
<td>50Hz</td>
</tr>
<tr>
<td>Neutral Point Earthed</td>
<td>Directly</td>
</tr>
<tr>
<td>3 phase Short circuit (rms)</td>
<td>10kA</td>
</tr>
<tr>
<td>Duration of Short Circuit</td>
<td>3s</td>
</tr>
</tbody>
</table>

*Table 1: Network parameters*

#### 4.1.2.3 Charge Point interior and external components

The Supplier is required to provide images of the interior and exterior of the Home and Workplace Charge Points.

#### 4.1.2.4 Charging Mode

The Charge Point shall support Mode 3 charging as defined in IEC 61851-1. The following functions shall be provided by the Charge Point:

a. Verification that the vehicle is properly connected
b. Continuous protective earth conductor continuity checking
c. Energization of the system
d. De-energization of the system
e. Selection of charging rate i.e. a means to ensure that the charging rate does not exceed the rated capacity of the mains, vehicle or battery capabilities
f. Determination of ventilation requirements for charging area (optional)

4.1.2.5 PWM Control Pilot Signal

b. Suppliers must demonstrate that the pilot signal parameters of the Charge Point or other similar products (timings, voltages etc.) have been validated by one or more electric vehicle manufacturer. There are differences in implementing the control pilot functionality which may result in vehicles from certain manufacturers not being able to charge or charge incorrectly from the Charge Point. The Supplier shall outline its efforts to mitigate this risk.
c. It should be possible for a timer equipped EV to remain connected to the Charge Point without charging until the EV decides to begin charging. If the Charge Point has timer functionality included within the unit, the EV timer should take priority and override the Charge Point timer.

4.1.2.6 Supply cable and vehicle connector

a. The supply cable and connector is required to be permanently attached to the Charge Point (Case C according to IEC61851-1). The supply cable must be sufficiently rated for the load supplied by the Charge Point. The supply cable shall be 5m in length.
b. The vehicle connector shall conform to the dimensions as set out in SAE J1772.

4.1.2.7 Electrical Protection

a. The Charge Point shall be connected to a distribution board (fuse board) at the main supply point in the building. At the distribution board a 20A RCBO with type A earth leakage protection and type C over current protection, 9kA rupturing capability will be installed on a dedicated circuit for the EV. Therefore it is not necessary to have an RCD or MCB within the Charge Point unit. Suppliers shall specify what (if any) overcurrent or earth leakage protection is onboard the Charge Point unit itself.
b. The Charge Point shall have an indelible label in a prominent location indicating that it must not be installed on circuits which have not been equipped with a 20A RCBO with Type A Earth leakage protection.

4.1.2.8 Power Contactors

a. The outlet shall have a contactor that energises the power supply to the outlet and neutral.
b. There should be a means to detect if a contactor has stuck closed. On detection, the mains supply to the outlet shall be disconnected by means of tripping an MCD or otherwise.
4.1.2.9 Timer Functionality

a. **It is a requirement that the Charge Point has functionality that allows the User to select the time when to charge their vehicle.** This functionality is required for EV owners to benefit from favourable electricity tariffs at certain time periods or other benefits.

b. This timer should give an indication to the User that a 'timer charge' mode has been selected. It shall be possible for the User to over ride this timer at any time if desired.

c. Some EVs (i.e Nissan LEAF) will have a timer onboard the vehicle. In this case, it shall be possible for the Charge Point to hand control over to the EV to determine when it will start charging. The Charge Point shall stay connected to such a vehicle and commence and finish charging at the required times.

4.1.2.10 Energy Metrology

a. **The Charge Point shall have a Measuring Instruments Directive (MID) compliant and certified meter.**

b. This meter shall contain a non-volatile, non-resettable cumulative kWh energy display (electromechanical or electronic).

4.1.3 User Interface

The User interface shall consist of at a minimum a single button or switch and a single tricolour LED. A means of stopping the charging via a button or switch shall be provided on the Charge Point.

The Charge Point should begin a charging session either by pushing a button or switch on the Charge Point or begin automatically as the vehicle connector of the charging cable attached to the Charge Point is inserted into the vehicle inlet of the EV.

The Charge Point should end a charging session either by pushing a button or switch on the Charge Point or stop automatically as the vehicle connector of the charging cable attached to the Charge Point is removed from the vehicle inlet of the EV.

Details of this interface shall be supplied by the Supplier.

4.1.3.1 LED

a. Light Emitting Diodes shall communicate the status and availability of the Charge Point to the User. The recommended states are the following:
   - Available - Blue
   - Charging - Green
   - Charge Finished - Flashing Green
   - Error - Red

b. The LED colours shall be programmable.

4.1.4 Charge Point Exterior
4.1.4.1 Material Composition and Images

Full details of the material composition of the Charge Point exterior, including estimated lifetime, resistance to corrosion and its long term performance under UV light, shall be provided. Photographs and renderings of the Charge Point shall be provided.

4.1.5 Safety and Equipment Requirements

4.1.5.1 Safety of Personnel

The Supplier shall provide ecar with evidence that the equipment complies with all relevant personnel safety standards.

4.1.5.2 Equipment Protection

The Supplier shall provide ecar with evidence that all equipment in the vicinity of the Charge Point is protected according to the relevant equipment safety standards.

4.1.5.3 IP Rating

The entire Charge Point shall provide a minimum degree of protection of IP44 when in operation or not in operation.

4.1.5.4 Tamper Proofing

Details shall be provided to ecar as to the degree of tamper proofing and anti-vandalism provided by the Supplier’s Charge Point.

4.1.5.5 Electrical Connection

a. The Charge Point shall be connected to a single phase (nominal 230V phase to neutral) supply. The electrical connection shall be made in accordance with BS 7671.

b. The Charge Point shall be connected to the network so as to not add any distortion to the network such as harmonics or flicker. The Supplier is required to provide evidence of this to ecar.

4.1.5.6 Bolts, Washers and Nuts

Bolts, washers and nuts shall be provided for all connections including cable terminations and shall be corrosion resistant.

4.1.5.7 Equipment Nameplate

A nameplate shall be fixed to the Charge Point displaying clearly the following details:

1. Manufacturer’s name
2. Equipment reference
3. Serial number
4. Date of manufacture
5. rated voltage in V
6. rated frequency in Hz
7. rated current in A
8. number of phases
9. IP degrees
10. Normal current rating of each socket
11. Gross weight
12. Reference to this specification

The nameplate shall be visible after installation.

The ecar logo should be clearly branded on the charge point;

4.1.5.8 Permissible Surface Temperature

The Charge Point shall comply with the maximum permissible surface temperatures as specified in BS 7671.

4.2 Data Supply and Management Requirements

a. To meet OLEV’s requirements for data on User’s charging behaviour, the following data will be required from the Charge Point for every charging session:
   i. Anonymised ID of user
   ii. Identifier for Charge Point
   iii. Start time
   iv. End time
   v. Total energy drawn (kWh)
   vi. Price paid (can be filled in manually after the event if necessary)

The Supplier will be required to host a service until 31st of March 2016 which will remotely collect the information outlined above to be provided, in a suitable format, to OLEV and ecar at quarterly reporting intervals.

b. As Charge Points will be installed in standalone locations without wired communications capability, the common communications medium is expected to be via persistent M2M data connections operating over the public mobile telephony infrastructure using GPRS. Wifi, (or better) data connections.
c. In the event of a loss in communication, the Supplier must ensure the communication device is repaired within 3 working days to ensure restoration of the data flow of data to OLEV and ecar.

d. The supplier must submit a summary proposal of how the data will be provided to ecar on a quarterly basis, and, a ‘screen grab’ computer image of the format to which this data will be delivered.

4.3 Other General Requirements

4.3.1 Health and Safety

Suppliers’ premises, practices and procedures shall conform to all relevant Health and Safety legislation in the country of manufacture.

4.3.2 Applicable Codes and Standards

4.3.2.1 Specification Codes and Standards

The equipment shall comply with this Specification including but not limited to the latest editions of the following standards and Codes and all standards and codes referenced within:

<table>
<thead>
<tr>
<th>Applicable Standards and Codes</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number</strong></td>
<td><strong>Title</strong></td>
</tr>
<tr>
<td>BS 7671</td>
<td>Requirements for electrical installations. IET wiring regulations. Seventeenth edition.</td>
</tr>
<tr>
<td>IEC Guide 113</td>
<td>Materials declaration questionnaires - Basic guidelines</td>
</tr>
<tr>
<td>BS EN ISO 9001:2008</td>
<td>Quality management systems - Requirements</td>
</tr>
<tr>
<td>ISO 14001</td>
<td>Environmental management systems - Specification with guidance for use</td>
</tr>
<tr>
<td>DIN 43 620</td>
<td>NH Fuses for 500 and 600 V AC and 440V DC</td>
</tr>
<tr>
<td>89/336/EEC</td>
<td>Electromagnetic Compatibility Directive</td>
</tr>
<tr>
<td>93/465/EEC</td>
<td>The affixing and use of the CE conformity marking</td>
</tr>
<tr>
<td>EU ROHS (2002/95EC)</td>
<td>Restriction of the use of certain hazardous substances in electrical and electronic equipment</td>
</tr>
<tr>
<td>IEC 61851</td>
<td>Electric vehicle conductive charging system</td>
</tr>
<tr>
<td>(BS EN 61851)</td>
<td></td>
</tr>
<tr>
<td>IEC 62196 (BS EN 62196)</td>
<td>Plugs, socket-outlets, vehicle couplers and vehicle inlets - Conductive charging of electric vehicles</td>
</tr>
</tbody>
</table>
4.3.2.2 General

a. The equipment shall carry the CE Mark in accordance with Direction 93/465/EEC.
b. Where a particular subject is not covered by one of the above standards then a recognised national standard shall apply.
c. This Specification shall take precedence in the case of any conflict between this Specification and any of the standards.

4.3.3 Environmental Design and Hazardous Substances

The following information outlined below should be supplied;

4.3.3.1 Hazardous Substances

Supplier shall declare all substances classified as hazardous in the plant being offered. These materials may be either hazardous to health (e.g. carcinogens, toxic, radioactive, dermatitis-inducing) or to the environment (e.g. contribute to global warming, ozone depletion, water pollution). This includes the provisions of the EU ROHS(2002/95/EC) and WEEE(2002/96/EC) Directives published in January 2003.

4.3.3.2 Safety Data Sheets

Supplier shall submit Safety Data Sheets for hazardous substances used in the item of plant. They shall be classified in accordance with The Health and Safety at Work Order (NI) 1978 (1978 No. 1039 (N.I. 9)). This also refers to packing waste that can have associated biological issues such as transmission of disease or introduction of unwanted flora and fauna.

4.3.3.3 Hazardous Substances Disposal

In the event that the successful Supplier supplies equipment that contains undeclared hazardous substances, the Supplier shall undertake to dispose of these hazardous substances at the Supplier's own expense.

4.3.3.4 Change of Law

The ________________(insert name) reserves the right to adapt these environmental requirements in the event of a change of law in Northern Ireland governing such matters.

4.3.4 Quality Assurance

4.3.4.1 Materials

All materials and workmanship shall be of a suitable type and quality to ensure that the equipment will operate satisfactorily in accordance with this Specification.
4.3.4.2 Final Approval

The final approval may be subject to completion of a satisfactory design risk assessment by the _________________ (insert name).

4.3.4.3 Registration

Registration to BS EN ISO 9001:2008 or equivalent is required. Suppliers shall provide evidence of current registration to this or other equivalent quality standards. Details of particular quality requirements must also be observed, such as:
- Maintenance of a risk register
- Recording of non-conformances and follow-up corrective action.
- Evidence of continuous improvement and reviewing of targets and objectives.
- Procedures and work instructions to facilitate quality production.
- Auditing.
- Statistical records of Quality Control Tests
Sample copies of completed statistical records on tests and quality control checks within the factory should be provided, in order to provide confirmation of Quality Control Procedures.

4.3.4.4 Quality Problems

In the event of quality problems which are likely to cause an impact on the equipment being supplied, the Supplier must inform the _________________ (insert name) immediately and this will result in loss of tender.

4.3.4.5 Subsequent Quality Issues

The Supplier will notify _________________ (insert name) immediately of any quality issues or defects which may subsequently come to light either with this particular equipment.

4.3.4.6 Return of Faulty Equipment

In the case of faulty equipment being returned by the User, the Supplier must replace the unit within 5 working days, and provide a preliminary report within two weeks of receipt of the goods, and a final comprehensive report within a further 4 weeks.

4.3.4.7 Audit

The ecar Project reserves the right to audit The Supplier and Sub-Suppliers to ensure compliance.

4.3.5. Delivery

Suppliers need to meet the following;
- The charge point units must be delivered and installed no later than 4 weeks from the date of ordering.

Should suppliers wish to visit the locations to view the proposed position of the charging units, to arrange an appropriate time please contact; (insert buyers contact details)
4.3.6. ecar Grant Conditions

As part of the ecar grant award process, grant applicants will require a letter from their supplier indicating the following;

- Supplier indicates that the product meets the recommended technical specification.
- Supplier agrees to provide the required anonymous data (as per recommended technical specification) on a quarterly basis to ecar and OLEV until March 31st 2016.
<table>
<thead>
<tr>
<th>Item No.</th>
<th>Clause</th>
<th>Description</th>
<th>Supplier reply (Yes or No – must be for product under offer, not optional)</th>
<th>Clarification reference</th>
<th>Document reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>4.1.2.1</td>
<td>Confirm that the Charge Point is suitable for connection to a single phase AC electrical supply at 230V phase to neutral voltage and capable of supplying up to 16A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>4.1.2.2</td>
<td>Confirm that the Charge Point is suitable for connection to the network parameters outlined in Table 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>4.1.2.3</td>
<td>Confirm that images of the interior and exterior of the Home and Workplace Charge Point is included in reply</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>4.1.2.4</td>
<td>Confirm that the Charge Point supports Mode 3 charging including: (a) - (e)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>4.1.2.4 (f)</td>
<td>Can the Charge Point determine ventilation requirements if needed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>4.1.2.5 (a)</td>
<td>Confirm that the Charge Point implement control pilot functionality as specified</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>4.1.2.5 (b)</td>
<td>Has the Charge Point or similar products undergone validation by an EV manufacturer. If so please provide evidence.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>4.1.2.5 (c)</td>
<td>Confirm that the Charge Point can function with a timer equipped EV with the timer on or off</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>4.1.2.6 (a)</td>
<td>Confirm that the Charge Point is supplied with a permanently attached charging cable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>4.1.2.6 (b)</td>
<td>Confirm that the Vehicle Connector of the supplied charging cable conforms to the SAEJ1772</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>4.1.2.7</td>
<td>Confirm the required level of electrical protection is provided</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>4.1.2.8</td>
<td>Confirm that a contactor is used to energise the power supply to the outlet and there is a method to detect and de-energise if the contactor is stuck closed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>4.1.2.9 (a)</td>
<td>Confirm that the Charge Point supports timer functionality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>4.1.2.9 (b)</td>
<td>Confirm the User is provided with an indication when timer functionality is in operation and that this functionality can be overridden at any time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item No.</td>
<td>Clause</td>
<td>Description</td>
<td>Supplier reply (Yes or No – must be for product under offer, not optional)</td>
<td>Clarification reference</td>
<td>Document reference</td>
</tr>
<tr>
<td>---------</td>
<td>--------------</td>
<td>--------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>-------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>15.</td>
<td>4.1.2.9 (c)</td>
<td>Confirm that the Charge Point will handover control to EV if the onboard timer of the EV is in operation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>4.1.2.10</td>
<td>Confirm that the Charge Point contains a MID approved meter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>4.1.3</td>
<td>Confirm that details of the User Interface is provided in reply</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>4.1.4.1</td>
<td>Confirm that details of the exterior composition, and images of the Charge Point are included in reply</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>4.1.5.1</td>
<td>Confirm that documentation has been provided to prove that the Charge Point complies with all the relevant personnel safety standards</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>4.1.5.2</td>
<td>Confirm that documentation has been provided to prove that the Charge Point complies with all the relevant equipment safety standards</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>4.1.5.3</td>
<td>Confirm that at least an IP44 rating is achieved. If higher, please specify</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>4.1.5.4</td>
<td>Confirm that details of tamper proofing and anti-vandalism have been provided</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>4.1.5.5 (a)</td>
<td>Confirm that the Charge Point can be connected in accordance with BS 7671</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>4.1.5.5 (b)</td>
<td>Confirm that the Charge Point does not add any distortion to the network such as harmonics or flicker. Please provide evidence.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>4.1.5.6</td>
<td>Confirm that all bolts, washers and nuts are corrosion resistant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.</td>
<td>4.1.5.7</td>
<td>Confirm that a nameplate with all the required information is fixed to the Charge Point</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27.</td>
<td>4.1.5.8</td>
<td>Confirm that the Charge Point complies with the maximum permissible surface temperatures as specified in BS 7671</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28.</td>
<td>4.2 (a)</td>
<td>Confirm Supplier will collect data on User EV charging behaviour and provide data to OLEV as described in 4.2 (a)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29.</td>
<td>4.2 (b)</td>
<td>Confirm the Charge Point has communication technology to communicate to a Charge Point Management System. Please provide details on communication technology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30.</td>
<td>4.2 (c)</td>
<td>Confirm that in the event of a loss in</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item No.</td>
<td>Clause</td>
<td>Description</td>
<td>Supplier reply (Yes or No – must be for product under offer, not optional)</td>
<td>Clarification reference</td>
<td>Document reference</td>
</tr>
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<td></td>
<td></td>
<td>communication, the Supplier can ensure the communication device is repaired to ensure the restoration of data to OLEV and ecar.</td>
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<tr>
<td>31.</td>
<td>4.2 (d)</td>
<td>Confirm submittal of data submission process, and, a ‘screen grab’ computer image of the data format.</td>
<td></td>
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<tr>
<td>32.</td>
<td>4.3.1</td>
<td>Confirm compliance with Health and Safety requirements</td>
<td></td>
<td></td>
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<tr>
<td>33.</td>
<td>4.3.2</td>
<td>Confirm acceptance and compliance with all the codes and standards as described in 4.3.2</td>
<td></td>
<td></td>
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<tr>
<td>34.</td>
<td>4.3.3.1</td>
<td>Confirm declaration of all hazardous substances</td>
<td></td>
<td></td>
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<tr>
<td>35.</td>
<td>4.3.3.2</td>
<td>Confirm submittal of Safety Data Sheets</td>
<td></td>
<td></td>
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<tr>
<td>36.</td>
<td>4.3.3.3</td>
<td>Confirm acceptance of hazardous substances disposal conditions</td>
<td></td>
<td></td>
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<tr>
<td>37.</td>
<td>4.3.3.4</td>
<td>Confirm acceptance of acceptance of change of law conditions in relation to environmental requirements</td>
<td></td>
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<tr>
<td>38.</td>
<td>4.3.4.1</td>
<td>Confirm suitability of equipment</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>39.</td>
<td>4.3.4.2</td>
<td>Confirm that installation method statements and risk assessments including recommendations to mitigate risks is supplied</td>
<td></td>
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<tr>
<td>40.</td>
<td>4.3.4.3</td>
<td>Confirm registration to ISO 9001:2008 or equivalent</td>
<td></td>
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<td>41.</td>
<td>4.3.4.4</td>
<td>Confirm agreement</td>
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<td>42.</td>
<td>4.3.4.5</td>
<td>Confirm agreement</td>
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<td>43.</td>
<td>4.3.4.6</td>
<td>Confirm agreement</td>
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<td>44.</td>
<td>4.3.4.7</td>
<td>Confirm agreement</td>
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