# PICTS Contract

# Schedule 15

# Environmental Conditions

**Document Info**

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**Revision History**

| Version | Date | Details of Changes | Author |
|---|---|---|---|
| 0.1 | 28/10/16 | First draft based on existing OMNI Schedule | Sopra Steria |
| 0.2 | 10/11/16 | Revised first draft | Sharpe Pritchard |
| 0.3 | 11/11/16 | Updated to address HSC | Sopra Steria |
| 0.4 | 11/11/16 | Previous changes accepted, additional comment re HSC | Sharpe Pritchard |
| 1.0 | 14/12/16 | Final version for completion | Sharpe Pritchard |

## 1. Introduction

1.1 This Schedule defines the environmental requirements for Hosting Facilities.

1.2 From the Commencement Date, the PROVIDER shall assume responsibility for management and support of Equipment located in the Hosting Facilities listed in Schedule 10 Annex C (hereinafter called the AUTHORITY's Hosting Facilities). This Schedule defines the environmental standards that will apply to these facilities.

1.3 This Schedule also defines a set of enhanced environmental standards that the PROVIDER will maintain in respect of Hosting Facilities not listed in Schedule 10 Annex C provided in connection with the delivery of Services under the Agreement (hereinafter called the PROVIDER's Hosting Facilities).

1.4 The PROVIDER will ensure that the technical design of the Infrastructure will take account of the quality of the environmental conditions and electrical supply that can reasonably be expected at the AUTHORITY's Hosting Facilities. The Parties acknowledge and agree that a failure by the AUTHORITY to provide the electricity supply, environmental conditions or otherwise to the AUTHORITY's Hosting Facilities (as defined under this Schedule 15) shall not constitute a Force Majeure event, as defined under Clause 30, provided that the AUTHORITY has made reasonable offers to meet its obligations in this Schedule 15, subject to any stated limitations in this Schedule.

## 2. Environmental Standards that will apply to the AUTHORITY's Hosting Facilities

2.1 The AUTHORITY will continue to operate and maintain in good working order any Equipment contributing to the maintenance of the environmental conditions in the AUTHORITY's Hosting Facilities that are in regular use on the Commencement Date, or replace this Equipment with an equivalent where necessary.

2.2 The AUTHORITY will maintain the material physical and electrical characteristics of the AUTHORITY's Hosting Facilities in the same state as they are on the Commencement Date.

2.3 The AUTHORITY will continue to carry out any regular activities contributing to the maintenance of the environmental conditions in the AUTHORITY's Hosting Facilities that are being carried out to a regular schedule on the Commencement Date.

2.4 The PROVIDER will not require the AUTHORITY to improve the environmental conditions in the AUTHORITY's Hosting Facilities beyond those which can reasonably be achieved with the Equipment, activities and characteristics of such room at the Commencement Date in order to meet the Service Levels.

## 3. Electricity Supply to the AUTHORITY's Hosting Facilities

3.1 The AUTHORITY will maintain the arrangements for electricity supply to the AUTHORITY's Hosting Facilities that are in operation at the Commencement Date, or at the AUTHORITY's discretion replace these with arrangements to supply electricity at an equivalent or superior level of quality.

3.2 Where the PROVIDER has reason to believe that the quality of the electricity supply is preventing delivery of the Services to the Service Levels required by the Agreement, the AUTHORITY will, at its reasonable discretion:

(A) conduct improvements to the electricity supply that are within its powers; and

(B) exercise its rights with the relevant electricity supply company or the owner of the premises being supplied to have improvements made to the electricity supply;

insofar as such improvements will improve the quality of the electricity supply to a level that will allow the Service Levels to be met.

3.3 Where the electricity supply to an AUTHORITY Hosting Facility can reasonably be anticipated to prevent delivery of the Services to the Service Levels at the Commencement Date, the PROVIDER shall propose a way in which the ability to meet Service Levels can be achieved.

## 4. Environmental Conditions in the PROVIDER's Hosting Facilities

4.1 The PROVIDER will ensure that all the conditions in Paragraphs 4.2 to 4.6 below are satisfied by the PROVIDER's Hosting Facilities. The Parties acknowledge that the Hemel Service Centre ('**HSC**') does not fully comply with the requirements set out in Paragraphs 4.2 to 4.6 below. The PROVIDER has informed the AUTHORITY of the specific requirements that the HSC does not satisfy in accordance with Clause 52.1.2 and the AUTHORITY agrees that no remediation or rectification work is required to modify the HSC to bring it to full compliance with those specific requirements.

### 4.2 Hosting Facility Architectural Requirements

(A) **Floor Type**

Hosting Facilities must have a raised access floor with fully liftable tiles for installation and access to communications cabling and power distribution.

(B) **Floor Covering**

Hosting Facility floors must have antistatic floor material bonded to all floor tiles. Materials must be cut to size to suit each tile and may be carpet or vinyl. The PROVIDER must ensure that the under-floor area is accessible at all times.

(C) **Floor Void**

Hosting Facilities must have a minimum floor void height of 250mm (not including tile thickness) in the case of raised access floor and the floor slab must be dust sealed.

(D) **Ceiling**

Hosting Facilities must have a dustproof finish to all ceilings, with a minimum clear 2400mm raised floor to ceiling features (lights, suspended ceiling, etc.) A suspended ceiling is not mandatory.

(E) **Walls and Partitions**

Hosting Facilities must have a dustproof sealed finish to all walls and partitions. All walls must be capable of supporting equipment. No skirting should be provided. All walls and partitions must satisfy Fire Authority regulations and or applicable rules.

(F) **Doors and Access**

Hosting Facilities must have a minimum double access door, with 1600mm clear opening width. The Hosting Facility must have an access route from the building exterior to the room interior to allow for cabinets 800mm x 1000mm x 2000mm tall. The door must have a vision panel to prevent accidents and for fire requirements.

(G) **Locks and Security**

The Hosting Facility must be secure and be designed to be compatible with the rest of the building.

(H) **Layout**

Equipment cabinets or racks must be installed in positions so as to provide front, rear and side access as recommended by the suppliers of the cabinets or racks and equipment held within them.

(I) **Location**

Equipment must not be in the vicinity of wet, mechanical or heavy current electrical services, nor should any pass through the Hosting Facility. If water-carrying pipe-work must pass through the Hosting Facility it should be arranged that there are no joints within the Hosting Facility.

4.3 **Hosting Facility Electrical Services**

(A) **Power Load and Distribution**

The Hosting Facility must support an equipment power density of 250 W/m². The distribution must be twin 16A SP+N+E plug and socket outlet connections to each cabinet and item of equipment. Circuits must be individual radial circuits. A dedicated 32A SP+N+E radial circuit terminating in a 32A plug and socket must be provided for PABX/ACD unit. If required by the PROVIDER and at the PROVIDER's own cost Hosting Facility power specifications may be upgraded by the PROVIDER.

(B) **Uninterruptible Power Supply (UPS)**

Within the Hosting Facility, power must be available to all cabinets and racks at 100%. This shall be delivered via a combination of UPS and standby generator provisions.

(C) **Emergency Power Off Buttons**

Hosting Facilities must have a minimum of one Emergency Power off button, ideally with a protective cover to prevent accidental operation.

(D) **Cleaner Sockets**

Hosting Facilities must have non-UPS wall mounted sockets.

(E) **Lighting**

Hosting Facilities must provide lighting of 350 – 500 Lux. emergency lighting is required, and local switch control is necessary.

(F) **Earthing**

The Hosting Facility must have a functional earth that is connected directly to the building main earth bar. The Hosting Facility must have safety earthing. The preferred provision would be an earth mesh under the raised floor in the main communications room connected directly to building earth. Each cabinet or piece of equipment should be bonded to this mesh.

## 4.4 Hosting Facility HVAC Services

(A) **Temperature Control**

Temperature within Hosting Facilities must be within the band 21 +/- 3ºC, 24 hours per day. The maximum rate of change must be 3º C per hour**.**

(B) **Heat Load**

Ventilation and Air Conditioning must be able to maintain the required temperatures with a heat load of 250W/m2.

(C) **Humidity Control**

Relative Humidity in the Hosting Facilities must be kept between 40-55% 24 hours per day.

(D) **Location**

The HVAC downflow unit may be located in the communications room. Main pipework must be outside the room. Pipework should not impede raised access floor.

(E) **Ventilation**

Hosting Facilities must provide sufficient ventilation to allow for staff to work through a full weekend. Air changes for infrequently occupied IT rooms must allow for occupation of double that predicted.

## 4.5 Fire Detection and Suppression in the Hosting Facility

Premises within which the Hosting Facilities are located will be manned twenty-four (24) hours per day, seven (7) days per week. A high sensitivity smoke detection system, in a 'double knock' configuration, must be installed in all Hosting Facilities. Power and air conditioning shutdown must only occur only in the event of a real fire in the Hosting Facility.

The Hosting Facility must be protected by fire suppression systems. The PROVIDER is responsible for establishing whether a gaseous fire suppression system is necessary for equipment insurance reasons and therefore whether additional sub-division of the Hosting Facility for efficiency of gas storage and discharge is necessary.

## 4.6 Hosting Facility Alarms

Premises within which the Hosting Facilities are located must have a BMS (Building Management System), security desk, and remote security facility in place. As a minimum there must be detectors and alarms for the following: outside temperature limits, the outside humidity limits, the Emergency Power Off (EPO) operation, moisture detection (applicable

especially for rooms under roof), high sensitivity smoke detection, air conditioning unit failure and other air conditioning unit alarms, mains/UPS status and other UPS alarms.