

APPENDIX 1: DEFINITIONS - HEATHROW ICT INFRASTRUCTURE

1 INTRODUCTION

The purpose of this Appendix 1 is to clarify terms used in the core documents related to HAL's Common Infrastructure (CI) Policy (the "Policy").

The term 'Information and Communication Technology' (ICT) is agreed as the overall descriptor, rather than IT or Telecommunications given the breadth covered (section 4 below relates).

Where the terms 'includes' or 'examples' are used in the tables below they are used in their normal sense of meaning as illustrations and neither limit nor exclude other items.

2 ORGANISATIONS

The following defines persons and organisations referred to specifically in this policy:

| Entity | Definition | Comment |
|-------------------|---|---|
| Passenger | Passengers of the airlines and those on the airport related to them | Includes: Members of the public 'meeters and greeters' Commercial organisations (e.g. Pre-booked mini-cabs) but not those with a formal contract with the airport (e.g. black cabs) |
| BAA/HAL | Owner/operator of Heathrow airport | Includes all HAL / BAA Service Providers, employees, agents and representatives |
| Airline | Any Airline that operates, or uses LHR | Includes any individual airline that is a member of the AOC in LHR |
| Airline Community | AOC nominated airlines or their representatives | Airlines, or their representatives, nominated at AOC meetings for example but not only the SSB. |
| Customer | All those with a formal relationship with the airport | Includes but is not limited to: : Airlines Airlines' Service Providers BAA/HAL retail tenants BAA/HAL concessionaires Control authorities or other statutory authorities Police and other public services |
| Service Provider | ICT service providers | Includes suppliers of services to: Passengers BAA/HAL Customers Other Service Providers |

3 COMMON INFRASTRUCTURE

Common infrastructure is the term applied when service providers or users of Information and Communications Technologies (ICT) services share the systems used – In this case, in and between LHR terminals or in and around LHR.

4 ELEMENTS OF ICT INFRASTRUCTURE

The following are the elements of the ICT Infrastructure:

| Element | Definition | Comment |
|-------------------------------|--------------------------------------|---|
| Applications | Services offered to Customers | Examples include: <ul style="list-style-type: none"> • FIDS • Telephony |
| Active Infrastructure | Energy consuming ICT equipment | Examples include: <ul style="list-style-type: none"> • Local Area Networks (LAN) hardware (hubs, switches, routers) • WLAN hardware (switches, access points) • Network Management |
| Passive Infrastructure | Non-energy consuming ICT elements | Examples include: <ul style="list-style-type: none"> • Cabling (copper & fibre-optic) • Support infrastructure (Cabinets, racks, patch panels & trays) |
| Common Passive Infrastructure | Non-energy consuming ICT elements | As above Passive Infrastructure but owned by HAL available for utilisation by Customers. |
| Facilities (for ICT) | Communication Rooms 'Comms Rooms' | Examples include: <ul style="list-style-type: none"> • Primary communication rooms • Secondary communication rooms • Closets All of the above may be shared |
| | Powered Facilities | Examples include: <ul style="list-style-type: none"> • Power and environmental systems |
| | Non-powered Facilities | Examples include: <ul style="list-style-type: none"> • Containment, pits and ducts within and between buildings for Passive Infrastructure. |
| Common Facilities (for ICT) | As Above | Owned by HAL available for utilisation by Customers. |

5 WIRELESS

Wireless technologies and services are defined as follows:

| Type | Definition | Comment |
|----------------|--|--|
| Licensed | Radio spectrum licensed by Ofcom to service providers for specific purposes | Examples include: <ul style="list-style-type: none"> • Mobile phones • Private Mobile Radio • Ground to Air Radio • Metropolitan Area Networks (MAN): WiMax • TV and Radio broadcasting |
| License Exempt | Radio spectrum defined for specific purposes which is restricted by technical and usage standards but where a license to operate is not required | Examples include: <ul style="list-style-type: none"> • Metropolitan Area Networks (MAN): WiMax • Local Area Networks (LAN): WiFi • Personal Area Networks (PAN): device controllers |

NB There is both licensed and license exempt spectrum that can be used for WiMax deployment. Common WLAN is owned by HAL and available for utilisation by Customers.

6 BASIS OF CHARGING (REFERENCE MODEL)

The following defines the basis for charging and has been derived from Appendix 7:

| Ref. | Type | Definition | Comment |
|------|-----------------------|---|--|
| 6.1 | Specified Activity | Defined by CAA as Specified Activity in Annex 8.1 of the conditions of use for HAL. In accordance with section 46(2) of the Airports Act 1986. Updated in the CAA decision paper dated 11 th Mar 2008. | Charges agreed on behalf of community by the Non Regulated Charges Group (NRCG). Examples include: <ul style="list-style-type: none"> • Electricity and other Utilities • Baggage • Check-in |
| 6.2 | Non Regulated Charges | By agreement with HAL and the AOC the Standard price for these products will initially be considered by the SSB and agreed by the NRCG. Subsequent price changes shall be considered by the SSB or | Charges agreed on behalf of community by the Non Regulated Charges Group (NRCG). Examples include: <ul style="list-style-type: none"> • Passengers with |

| | | | |
|-----|---------------------------------|--|---|
| | | appointed representatives and agreed by the NRCG. | Reduced Mobility (PRM) <ul style="list-style-type: none"> Waste charges |
| 6.3 | 3 rd Party Offerings | Commercial Agreements with service provider (Not HAL). | Contracts with supplier. Example: <ul style="list-style-type: none"> Radio, Telephony |
| 6.4 | Commercial Terms | Commercial Agreements with HAL. | Contract with HAL. Example: <ul style="list-style-type: none"> Telephony |
| 6.5 | Other | Charges recovered by another mechanism. | Charges included in other activities. Examples: <ul style="list-style-type: none"> Check-in Baggage |

NB The basis of charging for Specified Activities and Non Regulated Charges applies only to Airlines and / or their nominated Service Provider (in the provision of services to Airlines). All other Customers will be subject to Commercial Terms for the services that they may use.

7 CATEGORIES OF CONSTRUCTION WORK

At Heathrow there is a continuous programme of construction related works, which are governed and funded by the regulatory framework set by the Civil Aviation Authority (CAA) and agreed by Airline operators. ICT infrastructure may be installed, replaced, upgraded or removed as part of a construction project. The project categories are defined as follows:

| Category | Definition | Comment |
|--------------------|--|--|
| New Build | New facilities which did not exist previously or which replace existing facilities, including terminals, piers, baggage facilities and offices. | Examples include: <ul style="list-style-type: none"> T5 A /B/C T2 A/B/C T3 Integrated Baggage |
| Deep Refurbishment | Substantive work on the structural framework and/or the shell-and-core of a building, such as stripping walls down to the plaster-work, and possibly involving the replacement of many doors, windows and M&E equipment. | Examples include: <ul style="list-style-type: none"> T4 Check-in extension T4 new CIP lounges T4 A380 stands & gates |
| Refurbishment | Works which restore an area to an earlier condition, make new or like new. The restoration typically affects coverings and finishes, furniture and equipment | Examples include: <ul style="list-style-type: none"> Upgrade and replacement due to wear and tear: <ul style="list-style-type: none"> T3 Zone B-G refurb New or relocating tenant: |

| | | |
|--|---|---|
| | (including ICT) without needing deep refurbishment. | <ul style="list-style-type: none">○ Airline Relocations● Change of use:<ul style="list-style-type: none">○ Retail units change of tenant |
|--|---|---|

NB Further examples of refurbishment for the Q5 Heathrow CIP (Capital Investment Programme) are found in the table in Appendix 8. Q5 (Quinquenium 5) is the 5 year price cap regulation period from April 2008 to March 2013 set by the CAA.

A guide to the application of the Common Infrastructure Policy for the construction categories as it applies to Airlines and/or their nominated Service Providers or the Airline Community is given in Appendix 9.

A guide to the application of the Common Infrastructure Policy for the construction categories as it applies to other Customers is given in Appendix 10.
