

Sept 2010

**Electronic Communication Approval Process
(ECAP)
For Radio Frequency Devices**

ECAP Policy - Appendix F

Common Infrastructure Policy – Appendix 2

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1 Purpose

The purpose of this Appendix is to provide written clarification regarding the Electronic Communication Approval Process (ECAP), as it applies to all RF transmitting and receiving equipment detailed herein.

The full ECAP process governing ECAP for all HAL occupiers is contained within the 'Opal Book' – Fit Out Guidelines for Property Customers. All customers are subject to the ECAP process contained within the 'Opal Book'.

The 'Opal Book' – Fit Out Guidelines for Property Customers can be obtained via HAL Property on 0208 745 0666 or <http://www.baa.com/portal/controller/dispatcher.jsp?Ch=XYZProperty>

Only after completion of the (full) ECAP process and the ECAP Licence has been issued, is the applicant permitted to operate the ECAP approved system as set out in the ECAP licence. See section 10 ECAP Process.

BAA/HAL as the airport provider has both the responsibility and duty to manage the Radio Frequency and applications of technology that fall under ECAP and in order to do so require any and all users within the confines of London Heathrow (LHR) to follow this process.

ECAP processes exist at all BAA Airports for details for all other BAA Airports contact the local BAA Property office.

2 Scope and Jurisdiction

ECAP is applicable to all Radio Frequency (RF) transmitting and receiving equipment.

This document is applicable to;

- Wireless LANs (WLAN) operating on 2.4GHz, all channels except by agreement
- Wireless LANs that operate on 5GHz, all channels except by agreement
- Radio frequencies (RF) including any licenced by Ofcom
- Fixed antennae where power to the antennae is higher than 13dBm.

3 Non Interference (respect for quiet enjoyment of premises and other users)

With progressive technological advancement it is recognised that derivatives of existing technology could technically fall outside ECAP but in the interest of LHR and the Airline Community an overriding principle shall prevail regarding the "non interference" with other systems, users or Airlines.

The Non Interference Principle applies to all and any transmitting and/or receiving of frequencies and or electromagnetism.

Under the non interference principle there is a duty on HAL to enforce ECAP to protect the RF in LHR, but always have in mind regard for the affected operations.

On any occasion where an Airport User is suffering from interference from another party, be that another Airline, user, any provider or HAL itself, causing interference in any way to an approved WLAN /Radio system they are using, the suffering user can apply to HAL to regularise the interference and to obtain relief without delay. It

follows that HAL may be placed in a difficult position in that circumstances beyond their direct control might dictate how quickly HAL can react to rectify matters and it is recognised that under such circumstance they will apply the following ranking: health & safety (without question), legislative or regulatory provision (as an airport operator), operational dependency commercial implications. At all times they will deploy a practical, pragmatic and reasonable approach.

4 Declaration of existing WLAN / Radio usage

HAL and the Airlines recognise that there may be existing installations in use, which have either not had ECAP approval or any such approval may have lapsed or expired.

In order to gain full knowledge and therefore capability to manage the RF estate in LHR, HAL has agreed to provide a moratorium period for anyone that would otherwise not conform to ECAP provided any Airline or provider of services to an Airline follows the process to regularise that installation.

The moratorium period shall run until 31st December 2010 (the "**Moratorium Period**") after which time any unresolved issues will be treated on a case by case basis. The Moratorium Period may be extended at HAL's option and convenience owing to the volume of work necessary to consider the applications to regularise systems but any such time extension shall be on a case by case basis.

Any Airline, Service Providers and other users who are using either their own or another's RF System should confirm that a valid ECAP approval is in place or ensure that immediate action is taken to apply for this.

HAL will identify and contact all known users of any non regularised installation requesting that they either turn off such RF Systems or seek ECAP approval in accordance with this moratorium.

The SSB will be provided a listing of all identified non regularised RF Systems in order to support HAL in regularising these.

Where any RF System is not currently approved or any prior approval has lapsed, the Airline, Service Provider or user has the Moratorium Period to apply to regularise that system under this ECAP.

HAL will deploy a practical and reasonable approach to granting approval but it must ensure that current and approved systems are not compromised and maintain the Non Interference and Health and Safety Principles. If after appropriate consultation and sufficient time to replace any system has lapsed (max 3 months from notification) then the offending system may be turned off without any redress whatsoever.

5 Self Certification

Anyone wishing to deploy (including any testing) a RF System in its own demised area must be subject to any concession, lease and/or licence requirements, and shall evidence (at its own cost) that such a WLAN or RF system when operated will not Interfere with any other Airline, Service Provider, or user that might otherwise be affected. This may be by means of an independent expert in that technology field and/or by demonstrating that the Non Interference and Health and Safety Principles principle has been considered and that there will be no such interference. The Customer shall provide all necessary supporting evidence reasonably required by HAL which shall accompany the ECAP application. All and any testing must be carried out under an ECAP testing approval, including that performed by HAL.

See Section 3 of this document and Appendix C ECAP Policy Section 7 of the 'Opal Book' for details of the non interference policy.

6 Register of Systems (RF Register)

From 1st January 2011 HAL must maintain an accurate and up to date database, the 'RF Register', of all RF systems and have that information readily available for consultation by any member of the LHR community or at their request provide appropriate information and to do so at any reasonable time, without charge.

The RF Register should amongst other things capture at least the name of the Airline, Service Provider or user, a contact name, address, telephone number and email contact details. The date the system was approved, the period of approval for use and to what extent if any others parties may be affected and a brief description of the deployed system / installation.

7 Enforcement

HAL shall be responsible for instructing as required and to perform the disabling of an offending non compliant or not approved RF System, if after notifying the offending party that any such RF System does not have a valid ECAP approval or it is causing Interference to another Customer and any associated and reasonable costs for so doing shall be recoverable from the offending party.

If HAL performs the disabling it shall take reasonable care when undertaking the necessary actions.

An ECAP Licence shall only be valid for the period of the approved applicants' remaining occupation of a demised area and is non transferrable and shall only be utilised by the applicant or its nominated operational service provider.

8 Cost

The costs associated with each application for approval is dependent on which category it falls under, see Appendix 1 for current charges.

9 Category Definition

Category 0 - Unlikely that an inspection will be required however a records update, to include the HAL CAD master drawings and antenna database will most likely be required. No new infrastructure required and no location issues e.g. within an area which will cause interference or change to existing infrastructure that already has ECAP approval (frequency change is required, or a system upgrade)

Property - A site visit may be necessary in order to gain clarity of works, such as consideration of Asbestos and any impact on building fabric. A letter is required from HAL to the relevant Customer to confirm the works can be carried out, a copy of which will be placed on the lease or concession.

Examples:

- Vehicle based RF transmitting or receiving equipment
- Mobile equipment (hand held radios etc).
- Intrinsically 'touch safe installation' (i.e. power into antenna < 13.dBm)
- Self Certification

- Licence exempt equipment.

Work involved:

- Verification that Self Certification is appropriate.
- Update antenna database.
- Update sign off document records, if appropriate.
- CAD update.
- RAN creation
- Works Approval Licence creation
- Asbestos consideration /Check if info on database
- Departmental stakeholder engagement
- Consultation with NATS

Service Level: Response within 3 - 5 Working days from submission of the correctly completed documentation. The response shall include indication of the time involved to complete this application.

Category 1 - Inspection will be required and a records update, to include the HAL CAD master drawings and antenna database will most likely be required. New infrastructure antenna will be sited within a designated area.

Property - A site inspection is required in order to gain clarity of works, such as consideration of Asbestos and any impact on building fabric. A letter is required from HAL to the relevant Customer to confirm the works can be carried out, a copy of which will be placed on the lease or concession.

The Applicant will complete all sign-off requirements for the RF System to be given the ECAP approval.

Examples:

- Antenna relocation
- New antenna
- New carrier to existing infrastructure.
- WLAN (where 3rd parties provide interference surveys).

Work involved:

- Assessment against Common Infrastructure requirements.
- CAD update (single drawing).
- Antenna Database update.
- RF health and safety assessment.
- Consultation with NATS
- Check against Ofcom Interface requirements and licence requirements
- RAN creation
- Site inspection - A site visit post installation to confirm any approval conditions stated in the RAN have been complied with.
- Addition of sign off documents to records.
- Varied stakeholder engagement
- Permits raised
- Works Approval Licence creation

Service Level: Response within 3 - 5 Working days from submission of the correctly completed documentation. The response shall include indication of the time involved to complete this application.

Category 2 - Inspection is required. Scope of work is inspection, inspection report, update of HAL CAD master drawings and update of antenna database. New infrastructure antenna will be sited within a designated area.

Property - A site inspection is required in order to gain clarity of works, such as consideration of Asbestos and any impact on building fabric. A letter is required from HAL to the relevant Customer to confirm the works can be carried out, a copy of which will be placed on the lease or concession.

The Applicant will complete all sign-off requirements for the RF System to be given the ECAP approval.

Examples:

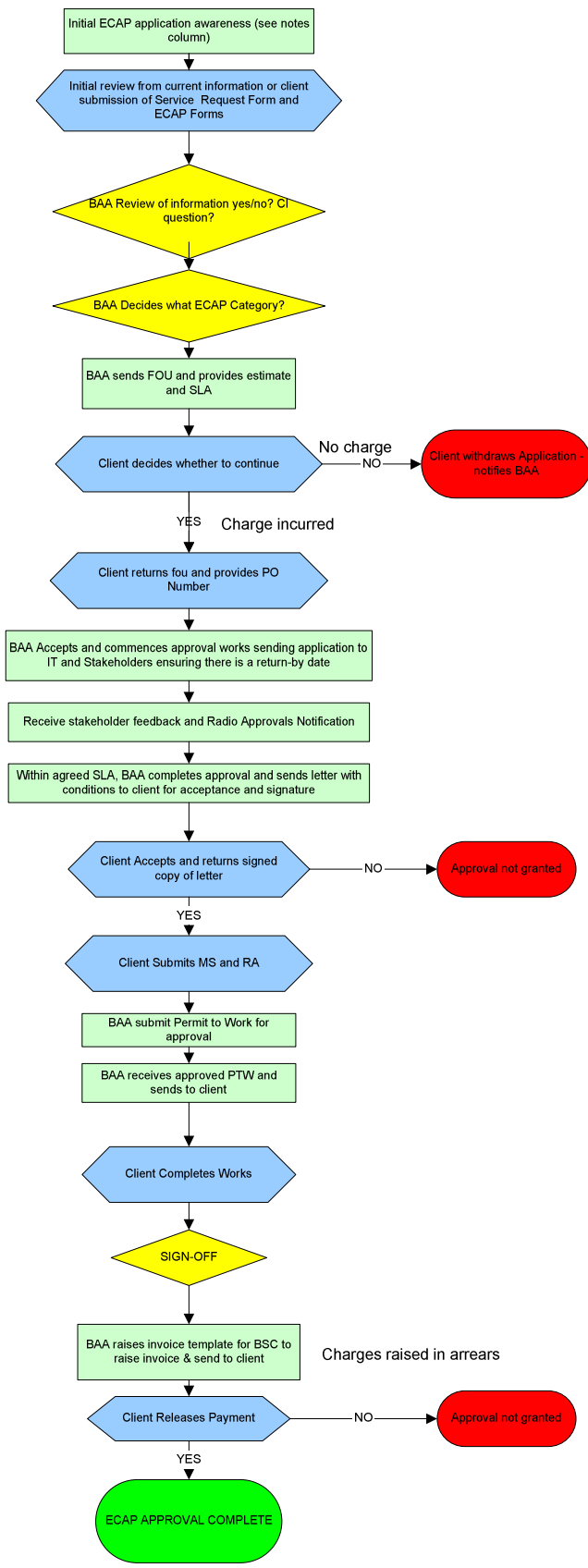
- Installations across multiple terminals
- WLAN (where HAL provide interference surveys, or survey support).

Work involved:

- Assessment against Common Infrastructure requirements.
- CAD update (multiple drawings).
- Antenna Database update.
- RF health and safety assessment.
- Consultation with NATS
- Check against Ofcom Interface requirements / Licence requirements.
- RAN creation
- Site inspection
- Addition of sign off documents to records.
- Interference assessment.
- Cable route meetings
- Identification of installation positions
- Vast stakeholder engagement
- Permits raised
- Works Approval Licence creation

Category 3 - Confirmation of requirement and price on application.

Service Level - Timescales will be advised and agreed.



10 ECAP Process

Applicant identifies the need to gain Electronic Communication Approval. This is required for any equipment that emits or receives radio frequency, which is within the scope and jurisdiction detailed above.

Applicant shall then contact Property Approvals in order to gain any necessary approval for any building works and the ECAP approval. In order to glean all of the required information the Essential Project forms and an ECAP equipment form needs to be completed these can be obtained via HAL Property on 0208 745 0666 or <http://www.baa.com/portal/controller/dispatcher.jsp?Ch=XYZProperty>

Once the forms have been submitted the HAL Property Approvals Team will issue a Form of Undertaking and send to the applicant to confirm that they have the relevant insurance indemnity and that the cost associated to gaining approval is acceptable.

Once the signed Form of Undertaking is returned to the HAL Approvals Team they will start consulting the Property Manager, Property Asset Manager, Asbestos Consultants, Terminal Operations and Radio Approvals team and any other interested parties.

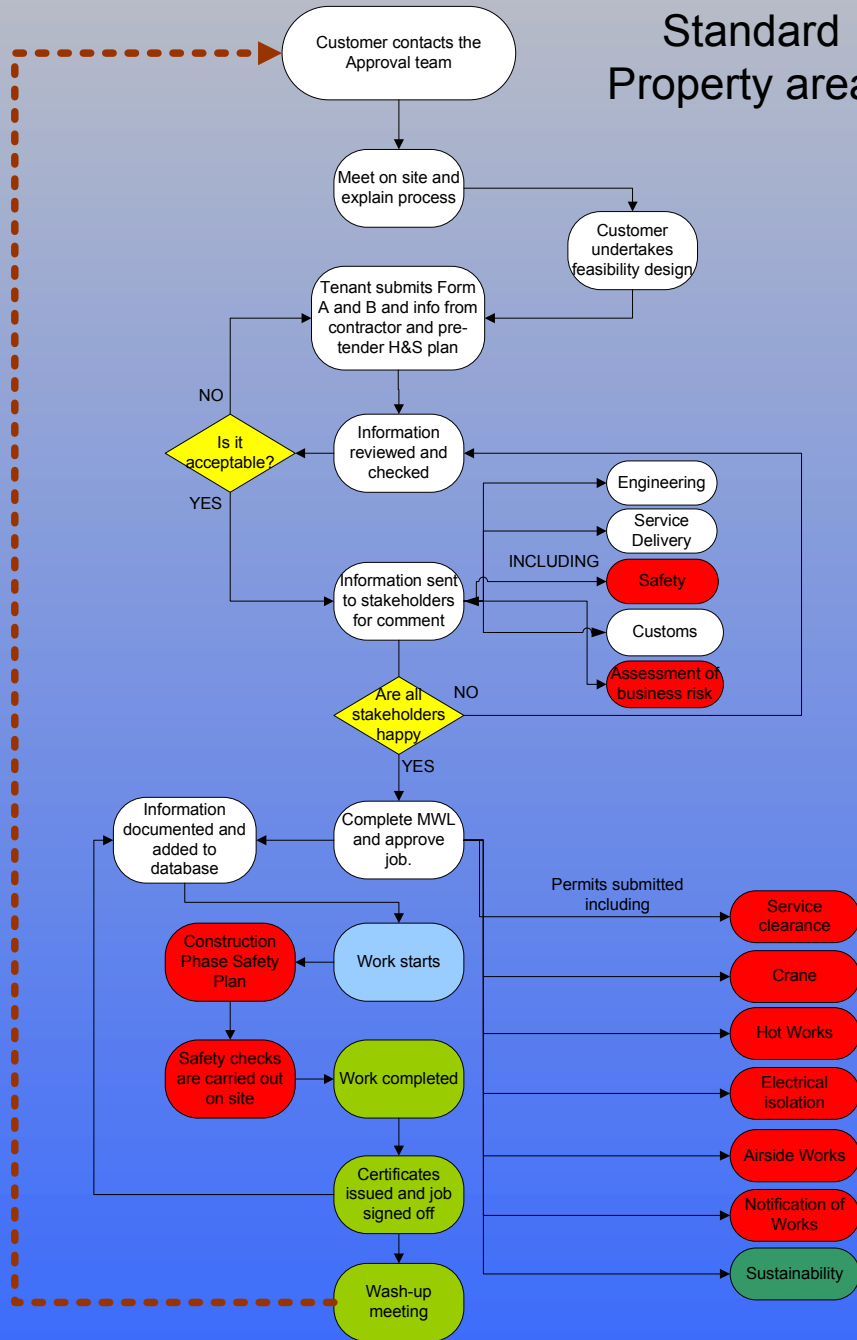
After all of the feedback is received from the interested parties and a Radio Approval Notice has been given, a Minor Works Licence will be written and then the Minor Works Licence and Radio Approval Notice is forwarded to the applicant / customer for signature and confirmation that the conditions placed upon the works are acceptable.

Once the signed Minor Works Licence is received, permits will be raised and the works can proceed. The Approvals manager will arrange for an invoice to be raised.

Service Levels for completed applications:

All correctly submitted forms submitted to the BAA website <http://www.baa.com/portal/controller/dispatcher.jsp?Ch=XYZProperty> will be responded to between 3 and 5 working days dependant on the complexity of the application and whether external agencies are required (for example for reports on asbestos or technical surveys).

Approvals Process for Standard Property areas



Appendix 1

Electronic Communication Approval Process – 2010 Pricing

Category 0	Nil Cost
Category 1	£660
Category 2	£920
Category 3	Quotation based on scope of works.