DATA PROTECTION ACT 1998

SUPERVISORY POWERS OF THE INFORMATION COMMISSIONER MONETARY PENALTY NOTICE

To: Cathay Pacific Airways Limited

Of: 4th Floor Waterfront Building, Manbre Road, London, Hammersmith Embankment, W6 9RU

- The Information Commissioner ("Commissioner") has decided to issue Cathay Pacific Airways Limited ("Cathay Pacific") with a monetary penalty under section 55A of the Data Protection Act 1998 ("the DPA"). This penalty is in relation to a serious contravention of the seventh data protection principle ("DPP7") by Cathay Pacific.
- 2. This notice explains the Commissioner's decision.

Legal framework for this Notice

- 3. The DPA implements European legislation (Directive 95/46/EC) aimed at the protection of the individual's fundamental right to the protection of their personal data. The DPA must be applied so as to give effect to that Directive.
- 4. The DPA applies to data controllers. Section 1 of the DPA provides that:
 - (1) 'data controller' means, subject to subsection (4), a person who (either alone or jointly or in common with other

persons) determines the purposes for which and the manner in which any personal data are, or are to be, processed.

- 5. Section 5 of the DPA provides that:
 - (1) Except as otherwise provided by or under section 54, this Act applies to a data controller in respect of any data only if—
 - (a) the data controller is established in the United Kingdom and the data are processed in the context of that establishment,
 - (3) For the purposes of subsections (1) and (2), each of the following is to be treated as established in the United Kingdom—
 - (d) any person who does not fall within paragraph (a), (b) or (c) but maintains in the United Kingdom-
 - (i) an office, branch or agency through which he carries on any activity, or
 - (ii) a regular practice; and the reference to establishment in any other EEA State has a corresponding meaning.
- 6. Cathay Pacific is incorporated in Hong Kong, but maintains a branch in the United Kingdom (registered with Companies House, with UK establishment number BR001755). As such, it is "established in the UK" by virtue of section 5(3)(d)(i) of the DPA. Moreover, that branch is engaged in the operational activities necessary to provide airline services, and therefore processes data in connection with those activities directly. The DPA therefore applies to Cathay Pacific as a data controller.
- 7. Section 4(4) of the DPA provides that, subject to section 27(1) of the DPA, it is the duty of a data controller to comply with the data protection principles in relation to all personal data in respect of which he is the data controller.

- 8. Schedule 1 of the DPA contains the eight data protection principles. In the present case, the relevant principle is DPP7, which stipulates as follows:
 - 7. Appropriate technical and organisational measures shall be taken against unauthorised or unlawful processing of personal data and against accidental loss or destruction of, or damage to, personal data.
- 9. As regards DPP7, the interpretative provisions in Part II of Schedule 1 to the DPA provide that:

The seventh principle

- 9. Having regard to the state of technological development and the cost of implementing any measures, the measures must ensure a level of security appropriate to—
- (a) the harm that might result from such unauthorised or unlawful processing or accidental loss, destruction or damage as are mentioned in the seventh principle, and
- (b) the nature of the data to be protected.
- 10. The data controller must take reasonable steps to ensure the reliability of any employees of his who have access to the personal data.
- 11. Where processing of personal data is carried out by a data processor on behalf of a data controller, the data controller must in order to comply with the seventh principle—
- (a) choose a data processor providing sufficient guarantees in respect of the technical and organisational security measures governing the processing to be carried out, and
- (b) take reasonable steps to ensure compliance with those measures.
- 12. Where processing of personal data is carried out by a data processor on behalf of a data controller, the data

controller is not to be regarded as complying with the seventh principle unless—

- (a) the processing is carried out under a contract—
- (i) which is made or evidenced in writing, and
- (ii) under which the data processor is to act only on instructions from the data controller, and
- (b) the contract requires the data processor to comply with obligations equivalent to those imposed on a data controller by the seventh principle.
- 10. Section 55A of the DPA empowers the Commissioner to issue monetary penalties. The relevant provisions are as follows:
 - (1) The Commissioner may serve a data controller with a monetary penalty notice if the Commissioner is satisfied that—
 - (a) there has been a serious contravention of section 4(4) by the data controller,
 - (b) the contravention was of a kind likely to cause substantial damage or substantial distress, and
 - (c) subsection (2) or (3) applies.
 - (3) This subsection applies if the data controller—
 - (a) knew or ought to have known
 - (i) that there was a risk that the contravention would occur, and
 - (ii) that such a contravention would be of a kind likely to cause substantial damage or substantial distress, but
 - (b) failed to take reasonable steps to prevent the contravention.
- 11. The Data Protection (Monetary Penalties) (Maximum Penalty and Notices) Regulations 2010 prescribe that the amount of any penalty determined by the Commissioner must not exceed £500,000.

12. The Commissioner has issued statutory guidance under section 55C(1) of the DPA about the issuing of monetary penalties that has been published on the Commissioner's website.

Background to the Case

- 13. Cathay Pacific is an airline, based in Hong Kong, flying to some 200 destinations around the world. In 2018, it (together with its local subsidiary, Cathay Dragon) carried 35.5 million passengers. In the course of providing airline services, Cathay Pacific collects the personal data of its passengers, including their passport numbers, names, contact details, dates of birth and nationalities.
- 14. In addition, Cathay Pacific operates a loyalty scheme, which rewards passengers who choose to fly with them. For that purpose, it also retains membership numbers, historical travel information and customer service information.
- 15. This Notice concerns a large-scale data breach which came to light in May 2018, but which had been ongoing since at least 15 October 2014. The breach affected four of Cathay Pacific's systems:
 - (1) System A, a reporting tool which compiles reports on a number of different databases, including its customer database.
 - (2) System B, used for processing and recording the membership details of data subjects in the member group.
 - (3) System C, a shared back-end database primarily used to support web-based applications.

- (4) System D, a transient database which allows Asia Miles members to redeem non-air awards.
- 16. Cathay Pacific first became aware of suspicious activity on 13 March 2018, when subjected to a brute force attack against its Active Directory database. This attack originated from an IT service provider's server which provided support to Cathay Pacific.
- 17. This attack prompted Cathay Pacific to launch an investigation. It instructed an independent third party, which it described to the Commissioner as a "leading cybersecurity firm", to assist in this investigation. The third party identified two groups of attackers, which it concluded were separate from each other due to the different tactics, techniques and procedures used.
 - (1) Group 1 was responsible for the attack on System A, and Cathay Pacific has not been able to establish how access to the network was achieved.
 - (2) Group 2 was responsible for the attack on Systems B, C and D. It appears that Group 2 entered first via an internet-facing server. Once able to move laterally within Cathay Pacific's environment, the attackers were able to install malware to harvest credentials from 10 August 2017. Using these credentials, Group 2 was then able to access a remote VPN, an external facing application platform and an administrative console.
- 18. The investigation concluded that the earliest known date of unauthorised access to Cathay Pacific's systems had been 15 October 2014. The earliest known date of unauthorised access to personal data was 2 July 2015. As a result of remediation

measures, the last day of unauthorised access to the personal data was 11 May 2018.

- 19. In total, approximately 9.4 million data subjects were affected by the data breach. Of these, 233,234 were from the EEA, and 111,578 were from the UK. 199,714 passport numbers issued by an EEA Member State were accessed. The breach encompassed a variety of types of personal data (in a variety of quantities), namely: passenger names, nationalities, dates of birth, phone numbers, email addresses, postal addresses, passport and identity card numbers, frequent flyer membership numbers, customer service remarks and historical travel information.¹
- 20. The Commissioner first became aware of the breach when Cathay Pacific self-reported on 25 October 2018. Cathay Pacific explained that several months were required to analyse the data and fully understand the impact of the breach, as well as to put in place customer care facilities and comprehensive and accurate individual notifications.
- 21. Cathay Pacific received some 12,000 complaints arising from the data breach, from customers worldwide. (Cathay Pacific was unable to confirm how many of these related to UK or EEA citizens.)

 The Commissioner received two complaints.
- 22. There have been no cases of confirmed misuse of the personal data accessed by the attackers. However, given the nature of the information, including passport numbers, it is likely that social engineering phishing attacks against those data subjects will be

¹ 20 EEA credit card numbers were also compromised. However, the chance of fraudulent use of these cards was low, as no CVV numbers were attached, and only two had expiry dates (one full, one partial). It is also likely that the cards had all expired by the time of the breach.

successful in the future, as the confidential information can be used to convince victims of legitimacy.

The contravention: DPP7

- 23. The Commissioner finds that Cathay Pacific contravened DPP7, due to a number of deficiencies in its data security.
- 24. The Commissioner finds that the contraventions were as follows.
 - (1) The database backups were not encrypted. This was contrary to Cathay Pacific's own policy, which requires data backups which contain personal data to be encrypted. If this policy had been followed, and the backups had been encrypted, the attackers would not have been able to access any personal data.

Cathay Pacific has explained that an exception had been made to the usual policy of encryption because a major data centre migration project was taking place. However, according to Cathay Pacific's Exceptions Policy, a form should be completed setting out why a particular policy could not be adhered to, the risks attached to that non-compliance and any measures which could be put in place to reduce or avoid those risks. The exception should then be registered with the Information Security Team. Cathay Pacific could not provide any evidence that the Exceptions Policy was adhered to in this case. Had that process been carried out, the risks of the lack of encryption would have been identified and either prevented or mitigated by alternative measures.

The internet-facing server was accessible due to a known and publicised vulnerability. Cathay Pacific suspects (but could not definitely say) that one internet-facing server was accessed by exploiting a vulnerability that had been published via the Common Vulnerabilities and Exposures ("CVE") system on 21 February 2007. The vulnerability had been described as allowing "remote attackers to bypass authentication and gain administrative access via direct request". The complexity of the vulnerability was described as low – meaning "very little knowledge or skill is required to exploit" it, and instructions on how to fix the vulnerability were provided.

Cathay Pacific did not apply the fix to the server, despite both the vulnerability and the fix having been public knowledge for over 10 years (by the end of the breach). Cathay Pacific said that its vulnerability scanning had not detected the vulnerability. However, its vulnerability scanner had been scanning for the relevant vulnerability since 2014. This shows that Cathay Pacific failed to manage its vulnerability scanning appropriately, enabling the attackers to exploit it as part of the data breach to carry out reconnaissance from the internet-facing server.

(3) The administrator console was publicly accessible via the internet. This console should only have been accessible to authorised Cathay Pacific employees or authorised third party support teams. No risk assessment was carried out in respect of the risks of affording third part access via a public accessible website, despite such an assessment being required by Cathay Pacific's third party access policy.

Cathay Pacific could have put in place controls which would have prevented attackers from accessing the site. For example, access could have been via a VPN, which would have allowed a third party to access the console without making the authentication page available to anyone with an internet connection. Had a risk assessment been carried out, per the policy, such controls could have been identified and implemented to mitigate the risks.

(4) System A was hosted on an operating system that was (and is) no longer supported. This means security updates were no longer released for the operating system. We are unable to say to what extent an out of date and insecure operating system had on the attack other than to comment that it creates an additional risk because it is no longer receiving security updates. This creates an obvious target for attacks. It also means systems used on this server that process personal data, or support the processing of personal data, will be at increased risk by nature of the operating system being unsupported.

Cathay Pacific's IT Assets Lifecycle Management Policy provides that hardware and software should be "refreshed" upon reaching their end-of-life. This could involve either replacement or enhancement of the relevant asset. Cathay Pacific neither replaced the operating system nor purchased any extended support. Had Cathay Pacific adhered to its policy, System A would not have been hosted on an out-of-date and vulnerable operating system. Although it is not possible to determine the extent to which this failing contributed to the data breach, it self-evidently makes the

personal data on or connected to the server less secure than they could be.

(5) Cathay Pacific could not provide evidence of adequate server hardening. Server hardening is a recommended process whereby any unnecessary applications, features, services and ports are removed, thereby minimising attack points. This was reflected in Cathay Pacific's policy that "all unused ports must be de-activated to avoid illegal access." No server hardening documentation was provided in respect of the servers which hosted its customer database, System A or D, (the last two systems of which have since been decommissioned).

Having identified the relevant ports used by the attackers in respect of each System, Cathay Pacific is unable to say whether those ports were authorised to be open or not.

(6) Network users were permitted to authenticate past the VPN without multi-factor authentication ("MFA"). MFA is a widely recommended measure to ensure that users are genuine, and not using misappropriated credentials. Some 41,000 users were able to access the VPN with just a user ID and password, with no second factor method of authentication. If Cathay Pacific had required MFA for every user, the attackers would not have been able to use the stolen credentials to access the VPN and the data breach would have been avoided. If Cathay Pacific had at least carried out a risk

assessment of the single-factor authentication system, it would have identified the risks and either implemented MFA sooner or put in place compensating controls. In September 2018, Cathay Pacific began rolling out MFA across all users.

- The anti-virus protection was inadequate. The server which hosted System B did not have anti-virus installed. Cathay Pacific explained this by reference to compatibility issues with the operating system. Cathay Pacific was unable to provide evidence of anti-virus protection in respect of the server hosting System C. If appropriate anti-virus protection had been in place, the attackers' use of malicious software could have been identified earlier.
- Patch management was inadequate. Cathay Pacific could not (8)provide any evidence of up-to-date patch management for either System A or System C servers. It did provide patch management logs in respect of the System B server, which show that packages were installed on 25 and 26 September 2017, 11 November 2017 and 26 July 2018. For the 8 months between November 2017 and July 2018, the relevant server was missing 16 security updates which resolved publicly known vulnerabilities (12 of which were described as "easily exploitable"). Similarly, log files for a compromised domain) showed that no controller (patches were installed between June 2016 and May 2017, during which time 12 Microsoft updates were made available. If Cathay Pacific had operated more effective patch management, attackers would have had less opportunity to exploit known vulnerabilities.

- (9) Forensic evidence was no longer available during the Commissioner's investigation. As referred to above, some servers were decommissioned following the data breach. Cathay Pacific pointed to this as a reason that it was unable to provide evidence to the Commissioner. However, it is clear that these servers were forensically analysed during Cathay Pacific's (and the third party cyber security firm) own investigations. If Cathay Pacific had followed best practice in terms of preservation of digital evidence, then more information would have been available.
- (10) Accounts were given inappropriate privileges. Several of the compromised user accounts were members of the domain administrator group, giving them full control of the domain. The greater freedoms attached to these accounts afford attackers more access to data and devices. Best practice is that no day-to-day user accounts should be in the domain administrator group other than the built-in Administrator account for the domain. It is also best practice to adhere to the concept of "just enough administration", whereby each account is only given the tools it needs to perform its own administrative tasks. Linked to that is the concept of "just in time administration", whereby such permissions are afforded for a limited period, rather than on a permanent basis.

These principles were reflected in the privileged accounts standard used by Cathay Pacific. Had Cathay Pacific adhered to these best practices and its own standards, rather than having 90 accounts permanently in the domain administrator group, it could have prevented the attackers from taking control of the most privileged user account in the domain and accessing other devices in its network.

- (11) Penetration testing was inadequate. Systems should be tested regularly with some guidance suggesting at least yearly and after any major change. For System C, B and A, Cathay Pacific was unable to provide information of when the last test had taken place. In respect of the others, one had not been tested since November 2016. That is a period of up to three years without penetration testing. Given the quantity and nature of the personal data held by Cathay Pacific, and the pace with which cybersecurity threats evolve and become more sophisticated, that is an inappropriately long period without a penetration test.
- (12) Retention periods were too long. Data in System B (used for processing data of members of various loyalty schemes) would be retained indefinitely, and would only be purged after seven consecutive years of "inactivity". Cathay Pacific explained that passengers would become "inactive" upon requesting that their account or membership be terminated, or upon dying. Seven years after that, the data would be purged. Some of these details would have become obsolete, for example numbers of expired passports. However, Cathay Pacific's retention policies are consistent across systems, and do not refer to the specific type of data in question.

If Cathay Pacific had applied more appropriate retention periods, less personal data would have been compromised. (It also contravenes the fifth data protection principle: "Personal data processed for any purpose or purposes shall not be kept for longer than is necessary for that purpose or those purposes.")

- 25. Cathay Pacific did have in place a wide array of proactive security measures and policies at the time of the attack. However, it failed to effectively manage those solutions, or to adhere to its own policies. Many of these failures and omissions were particularly negligent given the quantity and nature of the personal data controlled and processed by Cathay Pacific. If appropriate steps had instead been taken, they could have prevented or limited the scope or impact of the data breach, and/or ensured that the breach could have been detected and remedied sooner.
- 26. The Commissioner has gone on to consider whether the conditions under section 55A DPA were met.

Seriousness of the contravention

- 27. The Commissioner is satisfied that the contraventions identified above were serious. This is because of the large number of data subjects affected (9.4 million data subjects worldwide: 233,234 from the EEA; 111,578 from the UK), the types of personal data which were compromised (and in particular the likelihood that they could be used to perpetrate fraud), the number of failings identified and the long duration of the breach (over 3.5 years).
- 28. The Commissioner is therefore satisfied that condition (a) from section 55A(1) DPA is met.

Substantial damage or substantial distress

29. The Commissioner is satisfied that these contraventions were of a kind likely to cause substantial damage or distress, given the types of personal data which were compromised (and in particular the likelihood that they could be used to perpetrate fraud). The large

scale of the breach – in terms of (i) data subjects, (ii) breadth of personal data compromised and (iii) duration – would be likely to cause distress to those affected.

- 30. The Commissioner also notes that Cathay Pacific has received complaints from affected data subjects alleging economic loss, in particular relating to frequent flyer miles, although (to her knowledge) these complaints have not yet been substantiated.
- 31. The Commissioner is therefore satisfied that condition (b) from section 55A(1) DPA is met.

Deliberate or Negligent Contravention

- 32. The Commissioner considers that the contraventions were not deliberate.
- 33. However, the Commissioner is satisfied that Cathay Pacific ought reasonably to have known that the contraventions would both (i) occur and (ii) be of a kind likely to cause substantial distress. She is further satisfied that Cathay Pacific failed to take reasonable steps to prevent these contraventions. In reaching this view, the Commissioner has had regard in particular to: the fact that in many instances Cathay Pacific was failing to follow its own policies; the fact that the best practices which were ignored were so fundamental; the availability of knowledge about the various vulnerabilities, whether via CVE or via notice from the service provider; and the fact that available controls were not implemented timeously or at all.
- 34. In light of all of the above, the Commissioner is satisfied that the contraventions were negligent.

- 35. The Commissioner is, therefore, satisfied that condition (c) from section 55A(1) DPA is met.
- 36. She is also satisfied that the procedural requirements under section 55B have been complied with. The latter included issuing a Notice of Intent dated 10 September 2019 in which the Commissioner set out her preliminary thinking.
- The Commissioner received representations from Cathay Pacific in 37. response to the Notice of Intent, dated 14 November 2019, and has taken these into account when making her final determination. The Commissioner has considered all the circumstances and has reached the view that it is appropriate to issue a monetary penalty in this case. That view is based on the significant scale of the contravention, particularly with regard to the amount of data subjects involved, the nature of the processing, the susceptibility of the compromised personal data to be used fraudulently, and Cathay Pacific's failures to follow its own policies or implement security measures which were known to be necessary. The Commissioner has also considered the importance of deterring future contraventions of this kind, both by Cathay Pacific and by others. The Commissioner considers that the latter objective would be furthered by issuing a monetary penalty in this case.

The amount of the penalty the Commissioner intends to impose

- 38. The Commissioner has also taken into account the following aggravating features in this case:
 - (1) Cathay Pacific failed to follow its own policies, which demonstrates that it was aware of the risks posed by its omissions.

- (2) The duration of the breach was three years and seven months.
- (3) Cathay Pacific did not follow best practice in retaining data following the breach, in particular in relation to their decommissioned servers. This has prevented the Commissioner from having a comprehensive picture of Cathay Pacific's actions and omissions in the relevant period in relation to compromised systems.
- (4) Cathay Pacific's failures related to several of the most fundamental principles of data security. By way of illustration, Cathay Pacific failed to satisfy no less than four out of the five National Cyber Security Centre ("NCSC") basic Cyber Essentials, namely:
 - #2 Choose the most secure settings for your devices and software.
 - #3 Control who has access to your data and service extra permissions should only be given to those who need them.
 - #4 Protect yourself from viruses and other malware.
 - #5 Keep your device and software up to date.
- 39. The Commissioner also considers that there are significant mitigating factors to take into account, namely:

- (1) Cathay Pacific has acted promptly and forthrightly since it became aware of the data breach. In particular, it went above and beyond its legal obligations in issuing appropriate information to data subjects and co-operating with the Commissioner's investigation.
- 40. However, taking into account the size and resources of Cathay Pacific, the Commissioner considers that these steps were what could be expected of such an organisation.
- 41. The Commissioner's underlying objective in imposing a monetary penalty is to promote compliance with the DPA. She considers that, given the nature, seriousness and potential consequences of the contravention arising in this case, that objective would not be adequately served by an unduly lenient penalty.
- 42. Furthermore, the Commissioner does not consider that Cathay Pacific would be unable to pay a monetary penalty or be subjected to undue financial hardship.

Conclusion

- 43. Considering all of the above, the Commissioner has decided that a penalty in the sum of £500,000 (Five hundred thousand pounds) is reasonable and proportionate given the particular facts of the case and the underlying objective in imposing the penalty.
- 44. The monetary penalty must be paid to the Commissioner's office by BACS transfer or cheque by **Friday 13 March 2020** at the latest. The monetary penalty is not kept by the Commissioner but will be paid into the Consolidated Fund which is the Government's

general bank account at the Bank of England.

- 45. If the Commissioner receives full payment of the monetary penalty by **Thursday 12 March 2020** the Commissioner will reduce the monetary penalty by 20% to £400,000 (Four hundred thousand pounds). However, you should be aware that the early payment discount is not available if you decide to exercise your right of appeal.
- 46. There is a right of appeal to the First-tier Tribunal (Information Rights)

 against:
 - a) the imposition of the monetary penalty and/or;
 - b) the amount of the penalty specified in the monetary penalty notice.
- 47. Any notice of appeal should be received by the Tribunal within 28 days of the date of this monetary penalty notice.
- 48. Information about appeals is set out in Annex 1.
- 49. The Commissioner will not take action to enforce a monetary penalty unless:
 - the period specified within the notice within which a monetary penalty must be paid has expired and all or any of the monetary penalty has not been paid;
 - all relevant appeals against the monetary penalty notice and any variation of it have either been decided or withdrawn; and

- the period for appealing against the penalty and any variation of it has expired.
- 50. In England, Wales and Northern Ireland, the monetary penalty is recoverable by Order of the County Court or the High Court. In Scotland, the monetary penalty can be enforced in the same manner as an extract registered decree arbitral bearing a warrant for execution issued by the sheriff court of any sheriffdom in Scotland.

Dated the 10th day of February 2020



Stephen Eckersley
Director of Investigations
Information Commissioner's Office
Wycliffe House
Water Lane
Wilmslow
Cheshire
SK9 5AF

ANNEX 1

SECTION 55 A-E OF THE DATA PROTECTION ACT 1998

RIGHTS OF APPEAL AGAINST DECISIONS OF THE COMMISSIONER

- 1. Section 48 of the Data Protection Act 1998 gives any person upon whom a monetary penalty notice or variation notice has been served a right of appeal to the First-tier Tribunal (Information Rights) (the 'Tribunal') against the notice.
- 2. If you decide to appeal and if the Tribunal considers:-
- a) that the notice against which the appeal is brought is not in accordance with the law; or
- b) to the extent that the notice involved an exercise of discretion by the Commissioner, that she ought to have exercised her discretion differently,

the Tribunal will allow the appeal or substitute such other decision as could have been made by the Commissioner. In any other case the Tribunal will dismiss the appeal.

3. You may bring an appeal by serving a notice of appeal on the Tribunal at the following address:

GRC & GRP Tribunals PO Box 9300 Arnhem House 31 Waterloo Way Leicester LE1 8DJ

a) The notice of appeal should be sent so it is received by the Tribunal within 28 days of the date of the notice.

- b) If your notice of appeal is late the Tribunal will not admit it unless the Tribunal has extended the time for complying with this rule.
- 4. The notice of appeal should state:-
- a) your name and address/name and address of your representative (if any);
- b) an address where documents may be sent or delivered to you;
- c) the name and address of the Information Commissioner;
- d) details of the decision to which the proceedings relate;
- e) the result that you are seeking;
- f) the grounds on which you rely;
- g) you must provide with the notice of appeal a copy of the monetary penalty notice or variation notice;
- h) if you have exceeded the time limit mentioned above the notice of appeal must include a request for an extension of time and the reason why the notice of appeal was not provided in time.
- 5. Before deciding whether or not to appeal you may wish to consult your solicitor or another adviser. At the hearing of an appeal a party may conduct his case himself or may be represented by any person whom he may appoint for that purpose.
- 6. The statutory provisions concerning appeals to the First-tier Tribunal (Information Rights) are contained in sections 48 and 49 of, and Schedule 6 to, the Data Protection Act 1998, and Tribunal Procedure (First-tier Tribunal) (General Regulatory Chamber) Rules 2009 (Statutory Instrument 2009 No. 1976 (L.20)).