# Paul M. Schwartz & Daniel J. Solove Overview of Fair Information Practice Principles (FIPPs)

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| HEW - The Code of Fair     | The Code of Fair Information Practices of the Department of Health, Education and Welfare represents the first articulation of FIPPs.  |
| Information Pr., 1973      | http://epic.org/privacy/consumer/code_fair_info.html   |
| OECD - Privacy Principles, | As privacy law continued to evolve, the OECD, a group of 33 leading industrial countries concerned with global economics and   |
| 1980                       | development, proposed their influential OECD Privacy Principles. <a href="http://oecdprivacy.org/">http://oecdprivacy.org/</a>   |
| APEC - Privacy Frame-      | APEC, an organization of 21 Pacific Rim countries, introduced FIPPs in order to enable multinational businesses to implement uniform   |
| work, 2005                 | approaches to the use of personal data. The resulting guidelines strongly reflect the OECD Privacy Principles.   |
|                            | http://www.apec.org/Groups/Committee-on-Trade-and-Investment/~/media/Files/Groups/ECSG/05_ecsg_privacyframewk.ashx   |
| DHS - Fair Information     | The Privacy Office at the Department of Homeland Security's FIPPs resemble the OECD Privacy Principles as well.  |
| Practice Princ., 2008      | http://www.dhs.gov/xlibrary/assets/privacy/privacy_policyguide_2008-01.pdf   |
| White House - Consumer     | The Consumer Privacy Bill of Rights published by the White House aims to apply comprehensive and globally recognized FIPPs for   |
| Privacy Bill of Rights,    | purposes of consumer protection. <a href="https://Obamawhitehouse.archives.gov/sites/default/files/privacy-final.pdf">https://Obamawhitehouse.archives.gov/sites/default/files/privacy-final.pdf</a>   |
| 2012                       |  |
| FTC - Privacy Framework    | Recently, the Federal Trade Commission issued a major report about privacy, which also included FIPPs.   |
| and Impl. R., 2012         | http://ftc.gov/os/2012/03/120326privacyreport.pdf  |
| Privacy Act, 1974          | Among the early statutes that include FIPPs is the Privacy Act. It regulates the collection, use, and disclosure of personal data by   |
|                            | federal agencies. (5 USC § 552a)   |
| HIPAA, 1996                | Pursuant to HIPAA, the Department of Health and Human Services promulgated regulations of the privacy and security of medical  |
|                            | information. (45 CFR §§ 160, 162, 164)   |
| Gramm-Leach-Bliley Act     | The GLB Act seeks both to facilitate data sharing among financial institutions and their affiliates and to protect customer privacy. It  |
| (GLB), 1999                | contains FIPPs as well. (15 USC § 6801 et seq., 16 CFR §§ 313, 314)  |
| PIPEDA (Schedule 1),       | PIPEDA is a Canadian privacy statute that regulates all private-sector entities that collect personal information on Canadians and   |
| 2000                       | personal information used in connection with any commercial activity. <a href="http://laws-lois.justice.gc.ca/eng/acts/P-8.6/index.html">http://laws-lois.justice.gc.ca/eng/acts/P-8.6/index.html</a>  |
| EU Directive - EU Data     | The EU Data Protection Directive's goal is to facilitate the free flow of personal information within the EU by establishing an equally  |
| Protection Directive,      | high privacy level in all Member States. It is not directly binding, but implemented on the national level by each country. <a default="" files="" href="http://eur-ncber.nlm.nlm.nlm.nlm.nlm.nlm.nlm.nlm.nlm.nlm&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;1995&lt;/td&gt;&lt;td&gt;lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31995L0046:EN:HTML&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;EU Regulation - EU&lt;/td&gt;&lt;td&gt;The EU General Data Protection Regulation is the proposed successor to the EU Data Protection Directive. It seeks to update privacy&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;General Data Protection&lt;/td&gt;&lt;td&gt;law within the EU with a single law that will be immediately binding on all EU member states.&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Regulation, 2016&lt;/td&gt;&lt;td&gt;http://data.consilium.europa.eu/doc/document/ST-5419-2016-INIT/en/pdf&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;NAI Code of Conduct&lt;/td&gt;&lt;td&gt;The Network Advertising Initiative (NAI), an industry trade group, develops self-regulatory standards for online advertising, among&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;(Section II.), 2020&lt;/td&gt;&lt;td&gt;which are the NAI Code of Conduct. &lt;a href=" https:="" nai_code2020.pdf"="" sites="" www.networkadvertising.org="">https://www.networkadvertising.org/sites/default/files/nai_code2020.pdf</a> |
| AICPA Privacy              | The American Institute of CPAs (AICPA) and the Canadian Institute of Chartered Accountants (CICA) developed a set of FIPPs to be   |
| Management                 | used by companies in their self-regulation of privacy. It was revised in 2009 and renamed GAPP. In 2020 it was updated as the Privacy  |
| Framework, 2020            | Management Framework. <a href="https://www.aicpa.org/interestareas/informationtechnology/privacy-management-framework.html">https://www.aicpa.org/interestareas/informationtechnology/privacy-management-framework.html</a>  |
| DAA Self-Regulatory        | The Digital Advertising Alliance (DAA) is an organization that provides a self-regulatory FIPPs regime for interest-based advertising.   |
| Princ. for OBA, 2009       | https://digitaladvertisingalliance.org/sites/aboutads/files/DAA_files/seven-principles-07-01-09.pdf  |
| GSMA Mobile Privacy        | The GSMA is an association of mobile operators and related companies devoted to supporting the standardization, deployment, and  |
| Principles, 2012           | promotion of the GSM mobile telephone system. It also released a self-regulatory framework containing FIPPs.   |
|                            | https://www.gsma.com/publicpolicy/wp-content/uploads/2012/03/GSMA2016_Guidelines_Mobile_Privacy_Principles.pdf   |

## **Chart 2a: FIPPs Comparison - Frameworks & Statutes**

## A. Data Accuracy, Completeness, Updates

| HEW - The Code<br>of Fair<br>Information<br>Practices (1973) | OECD - Privacy<br>Principles (1980)                                  | APEC - Privacy<br>Framework<br>(2005)                                       | DHS - Fair<br>Information<br>Practice<br>Principles (2008)  | The White House - Consumer Privacy Bill of Rights (2012)                                      | FTC - Privacy Framework and Implementation Recommendation (2012)  |                            |
|--|--|---|---|---|---|----------------------------|
| N/A  | 2. "Personal data should be accurate, complete and kept up-to-date." | VI. "Personal information should be accurate, complete and kept up-to-date" | Data Quality and Integrity: "DHS should, to the extent practicable, ensure that PII is accurate, relevant, timely, and complete." | 5. "Companies should use reasonable measures to ensure they maintain accurate personal data." | Privacy by Design - A. Final Principle: "Companies should incorporate substantive privacy protections into their practices, such as data accuracy." | continuing on<br>next page |

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| Privacy Act (5<br>USC § 552a)<br>(1974)  | HIPAA (45 CFR §§<br>160, 162, 164)<br>(1996) | Gramm-Leach-<br>Bliley Act (15 USC<br>§ 6801 et seq., 16<br>CFR §§ 313, 314)<br>(1999) | PIPEDA (Schedule<br>1) (2000)   | EU Data<br>Protection<br>Directive (1995)  | EU General Data<br>Protection<br>Regulation (2016)  |
|--|--|--|---|--|---|
| (c) "Each agency shall (1) keep an accurate accounting of [certain disclosures]; and (4) inform any person or other agency about any correction" | N/A  | N/A  | 4.6 Principle 6: "Personal information shall be as accurate, complete, and up-to-date as is necessary for the purposes for which it is to be used." | Art. 6:  1. "[P]ersonal data must be: (d) accurate and kept up to date; every reasonable step must be taken to ensure that data which are inaccurate or incomplete are erased or rectified;" | Art. 5: "Personal data shall be: (d) accurate and, where necessary, kept up to date; every reasonable step must be taken to ensure that personal data that are inaccurate are erased or rectified without delay;" |

| HEW - The Code<br>of Fair<br>Information<br>Practices (1973)   | OECD - Privacy<br>Principles (1980)   | APEC - Privacy<br>Framework<br>(2005)  | DHS - Fair<br>Information<br>Practice<br>Principles (2008)   | The White House - Consumer Privacy Bill of Rights (2012)   | FTC - Privacy Framework and Implementation Recommendation (2012)  |                         |
|--|---|--|--|--|---|-------------------------|
| 3. "There must be a way for a person to prevent information about the person that was obtained for one purpose from being used or made available for other purposes without the person's consent." | 2. "Personal data should be relevant to the purposes for which they are to be used"  3. "[Use of personal data should be] limited to the fulfilment of those purposes [for which they were collected] or such others as are not incompatible with those purposes" | III. "The collection of personal information should be limited to information that is relevant to the purposes of collection"  IV. "[Subject to consent and other exceptions p]ersonal information collected should be used only to fulfill the purposes of collection and other compatible or related purposes" | Purpose Specification: "DHS should articulate the purpose or purposes for which the PII is intended to be used."  Data Minimization: "DHS should only collect PII that is directly relevant and necessary to accomplish the specified purpose(s)"  Use Limitation: "DHS should use PII solely for the purpose(s) specified in the notice." | 3. "Companies should limit use and disclosure to purposes consistent with the consumer[] [relationship] and the [disclosure] context"  6. "Companies should collect only as much personal data as they need to accomplish purposes specified [at 3.]." | Simplified Consumer Choice - B. Final Principle: "Companies should obtain affirmative express consent before (1) using consumer data in a materially different manner than claimed when the data was collected; or (2) collecting sensitive data for certain purposes." | continuing on next page |

| Privacy Act (5<br>USC § 552a)<br>(1974)   | HIPAA (45 CFR<br>§§ 160, 162, 164)<br>(1996)   | Gramm-Leach-<br>Bliley Act (15 USC<br>§ 6801 et seq., 16<br>CFR §§ 313, 314)<br>(1999)   | PIPEDA (Schedule<br>1) (2000)  | EU Data<br>Protection<br>Directive (1995)   | Protection Regulation (2016)   |
|---|--|--|--|---|--|
| (e) "Each agency shall (1) maintain only such information as is relevant and necessary; (3) inform each individual (B) [of] the purpose for which the information is intended to be used; [and] (11) publish in the Federal Register notice of any new use" | § 164.502(b) "When using or disclosing protected health information or when requesting protected health information from another covered entity, a covered entity must make reasonable efforts to limit protected health information to the minimum necessary to accomplish the intended purpose of the use, disclosure, or request." (See also § 164.514(d).) | § 6802(c)  "[N]onaffiliated third part[ies receiving] information shall not disclose [those] to [other] nonaffiliated third part[ies]."  § 6802(d)  "[Subject to exceptions, a] financial institution shall not disclose an account number or similar [financial information] to any nonaffiliated third party for [marketing use]." (For details, see 16 CFR § 313.10 | 4.2 Principle 2:  "The [collection] purposes shall be identified at or before the time [of collection]."  4.4 Principle 4:  "The collection shall be limited to the purposes identified by the organization."  4.5 Principle 5:  "[Subject to exceptions, plersonal information shall not be used or disclosed for other than [collection purposes]" | Art. 6:  1. "[P]ersonal data must be: (b) collected for specified, explicit and legitimate purposes and not further processed in a way incompatible with those purposes; (c) adequate, relevant and not excessive in relation to the purposes for which they are collected and/or further processed;" | Art. 5:  "Personal data shall be: (b) collected for specified, explicit and legitimate purposes and not further processed in a way incompatible with those purposes; (c) adequate, relevant and limited to what is necessary in relation to the purposes;" |
|   |  | et seq.)   |  |   |  |

| HEW - The Code<br>of Fair<br>Information<br>Practices (1973)   | OECD - Privacy<br>Principles (1980)   | APEC - Privacy<br>Framework<br>(2005)   | DHS - Fair<br>Information<br>Practice<br>Principles (2008)   | The White House - Consumer Privacy Bill of Rights (2012)  | FTC - Privacy<br>Framework and<br>Implementation<br>Recommendation<br>(2012)  |                         |
|--|---|---|--|---|---|-------------------------|
| 3. "There must be a way for a person to prevent information about the person that was obtained for one purpose from being used or made available for other purposes without the person's consent." | 1. "There should be limits to the collection of personal data and any such data should be obtained with the knowledge or consent of the data subject."  4. "[Subject to consent and other exceptions, p]ersonal data should not be disclosed, made available or otherwise used for purposes other than those specified" | III. "[A]ny [collected personal] information should be obtained with notice to, or consent of, the individual concerned."  V. "[I]ndividuals should be provided with clear, prominent, easily understandable, accessible and affordable mechanisms to exercise choice in relation to the collection, use and disclosure of their personal information." | Transparency: "DHS should provide notice to the individual regarding its collection, use, dissemination, and maintenance of [PII]."  Individual Participation: "DHS should to the extent practicable, seek individual consent for the collection, use, dissemination, and maintenance of PII." | 1. "Consumers have a right to exercise control over what personal data companies collect and how they use it Companies should offer consumers clear and simple choices, presented at times and in ways that enable consumers to make meaningful decisions about personal data collection, use, and disclosure." | Simplified Consumer Choice - Baseline Principle:  "[S]implify consumer choice."  A. Final Principle:  "Companies do not need to provide choice [for practices in] context of the transaction or the company's relationship with the consumer"  B. Final Principle:  "[C]ompanies should offer the choice at a time and in a context in which the consumer is making a decision" | continuing on next page |

| Privacy Act (5<br>USC § 552a)<br>(1974)   | HIPAA (45 CFR<br>§§ 160, 162, 164)<br>(1996)   | Gramm-Leach-<br>Bliley Act (15 USC<br>§ 6801 et seq., 16<br>CFR §§ 313, 314)<br>(1999)  | PIPEDA (Schedule<br>1) (2000)   | EU Data<br>Protection<br>Directive (1995)   | EU General Data<br>Protection<br>Regulation (2016)   |
|---|--|---|---|---|--|
| (b) "No agency shall disclose any record except with the prior written consent of the individual to whom the record pertains [or if other exceptions apply]." | § 164.508(a)(1) "Except as otherwise permitted or required, a covered entity may not use or disclose protected health information without an authorization [by the treated individual]." | § 6802(a)  "[Subject to exceptions], a financial institution may not disclose [customer] information, unless [it notifies the customer]." (See § 6803.)  § 6802(b)  "A financial institution may not disclose [consumer] information unless [it] discloses to the consumer [the opt out possibility and gives notice]." (See § 6804.) (For details, see 16 CFR § 313.4 et seq.) | 4.3 Principle 3: "The knowledge and consent of the individual are required for the collection, use, or disclosure of personal information, except where inappropriate."  4.3.2 "To make the consent meaningful, the purposes must be stated in such a manner that the individual can reasonably understand" | Art. 7:  "[P]ersonal data may be processed only if: (a) the data subject has unambiguously given his consent; or [(b)-(f) it is necessary in certain enumerated situations]." (See Art. 8 for consenting to the processing of sensitive personal data.) | Art. 6:  1. "Processing [of personal data] shall be lawful only if: (a) the data subject has given consent for specific purposes; [or processing is necessary in certain enumerated situations]."  (See also Art. 7 for conditions for consent, Art. 8 for processing personal information of a child, Art. 9 for processing of special categories of personal data, and Art. 21 for the right to object.) |

| HEW - The Code<br>of Fair<br>Information<br>Practices (1973)   | OECD - Privacy<br>Principles (1980)                                      | APEC - Privacy<br>Framework<br>(2005)   | DHS - Fair<br>Information<br>Practice<br>Principles (2008)   | The White House - Consumer Privacy Bill of Rights (2012)  | FTC - Privacy Framework and Implementation Recommendation (2012)   | 10/3                    |
|--|--|---|--|---|--|-------------------------|
| 5. "Any organization must assure the reliability of the data for their intended use and must take precautions to prevent misuses of the data." | 5. "Personal data should be protected by reasonable security safeguards" | I. "[I]nformation protection should prevent the misuse of [personal] information [It] should take account of [the] risk [of misuse]"  VII. "[I]nformation controllers should protect personal information with appropriate safeguards Such safeguards should be proportional" | Data Minimization: "DHS should only retain PII for as long as necessary to fulfill the specified purpose(s). PII should be disposed of in accordance with DHS records disposition schedules"  Security: "DHS should protect PII through appropriate security safeguards against risks" | 4. "Consumers have a right to secure and responsible handling of personal data. Companies should assess the risks associated with their personal data practices and maintain reasonable safeguards to control risks"  6. "Companies should securely dispose of or deidentify personal data once they no longer need it" | Privacy by Design - A. Final Principle: "Companies should incorporate substantive privacy protections into their practices, such as data security, reasonable collection limits, sound retention and disposal practices" | continuing on next page |

| (1999)   |  |
|--|--|
| exceptions, e]ach agency shall (2) retain [an] accounting [of disclosures]"  (e) "Each agency shall (10) establish appropriate administrative, technical, and physical safeguards to insure the security and confidentiality of records"  (a) the controller must in institutions shall develop, implement, and maintain a comprehensive information security of protect the privacy of protected health information." (See generally \$ 164.302 et seq.)  (b) Each agency shall (10) establish appropriate administrative, technical, and physical safeguards to insure the security and confidentiality of records"  (covered entity must have in place appropriate administrative, technical, and physical safeguards to insure the security and confidentiality of records"  (a) "Each agency shall (10) establish appropriate administrative, technical, and physical safeguards to insure the security and confidentiality of records"  (a) "Each agency shall (10) establish information." (See generally \$ 164.302 et seq.)  (b) "Presonal information shall be protected by security appropriate to the information." (See all details in 16 CFR \$ 314)  (comprehensive appropriate to the information." (See all details in 16 CFR \$ 314)  (comprehensive appropriate to the information." (See all details in 16 CFR \$ 314)  (comprehensive appropriate to the information." (See all details in 16 CFR \$ 314)  (comprehensive appropriate to the information." (See all details in 16 CFR \$ 314)  (comprehensive appropriate to the information." (See all details in 16 CFR \$ 314)  (comprehensive appropriate to the information." (See all details in 16 CFR \$ 314)  (comprehensive appropriate to the information." (See all details in 16 CFR \$ 314)  (comprehensive appropriate to the information." (See all details in 16 CFR \$ 314)  (comprehensive appropriate to the information." (See all details in 16 CFR \$ 314)  (comprehensive appropriate to the information (See all details in 16 CFR \$ 314)  (comprehensive appropriate | Art. 32:  1. "Taking into account the state of the art, the costs of implementation and the nature, scope, context and purposes of processing as well as the risk of varying likelihood and severity for the rights and freedoms of natural persons, the controller and the processor shall implement appropriate technical and organisational measures to ensure a level of security appropriate to |

| HEW - The Code<br>of Fair<br>Information<br>Practices (1973)                               | OECD - Privacy<br>Principles (1980)   | APEC - Privacy<br>Framework<br>(2005)  | DHS - Fair<br>Information<br>Practice<br>Principles (2008)   | The White House - Consumer Privacy Bill of Rights (2012)  | FTC - Privacy<br>Framework and<br>Implementation<br>Recommendation<br>(2012)   | 12/3                    |
|--|---|--|--|---|--|-------------------------|
| 1. "There must be no personal data record-keeping systems whose very existence is secret." | 6. "There should be a general policy of openness about developments, practices and policies with respect to personal data." | II. "Personal information controllers should provide statements about their practices and policies that should include: a) the fact that personal information is being collected; b) the purposes for which personal information is collected; [and further information]." | Transparency: "DHS should be transparent and provide notice to the individual regarding its collection, use, dissemination, and maintenance of personally identifiable information (PII)." | 2. "Consumers have a right to information about privacy and security practices [C]ompanies should provide clear descriptions of what personal data they collect, why they need the data, how they will use it [and further information]." | Transparency - Baseline Principle: "Companies should increase the transparency of their data practices."  A. Final Principle: "Privacy notices should be clearer, shorter, and more standardized"  C. Final Principle: "All stakeholders should expand their efforts to educate consumers" | continuing on next page |

| <br>Privacy Act (5   | HIPAA (45 CFR  | Gramm-Leach-                                     | PIPEDA (Schedule   | EU Data  | EU General Data  |
|--|--|--|--|--|--|
| USC § 552a)  | §§ 160, 162, 164)  | Bliley Act (15 USC                               | 1) (2000)  | Protection   | Protection   |
| (1974)   | (1996)   | § 6801 et seq., 16<br>CFR §§ 313, 314)<br>(1999) | 1, (2000)  | Directive (1995)   | Regulation (2016)  |
| (e) "Each agency that maintains a system of records shall (4) publish in the Federal Register upon establishment or revision a notice of the existence and character of the system of records" | § 164.520(a)(1) "[Subject to exceptions], an individual has a right to adequate notice of the uses and disclosures of protected health information, and of the individual's rights and the covered entity's legal duties" (Details in § 164.520(b).) | N/A  | 4.8 Principle 8: 4.8.1 "Organizations shall be open about their policies and practices with respect to the management of personal information."  4.8.2 "The information made available shall | Art. 10:  "[T]he controller or his representative must provide a data subject with at least the following information:  (a) the identity of the controller; (b) the purposes of the processing; (c) further information" | Art. 12: 1. "The controller shall take appropriate measures to provide information [about data processing] in a concise, transparent and easily accessible form" Art. 13: 1. "[It shall]             |
|  | § 164.530(i)(1) "A covered entity must implement policies and procedures with respect to protected health information"   |  | include (a) [contact details to inquire about policies and practices], (b) the means of gaining access to personal information [and further information]."                                   | (See Art. 11 for<br>the case where<br>information was<br>not obtained<br>from the data<br>subject.)  | provide the data subject with the following information: (a) the identity of the controller; (b) the contact details of the data protection officer; [and further information]." (See also Art. 14.) |

| HEW - The Code<br>of Fair<br>Information<br>Practices (1973)   | OECD - Privacy<br>Principles (1980)   | APEC - Privacy<br>Framework<br>(2005)  | DHS - Fair<br>Information<br>Practice<br>Principles (2008)  | The White House - Consumer Privacy Bill of Rights (2012)   | FTC - Privacy Framework and Implementation Recommendation (2012)   |                         |
|--|---|--|---|--|--|-------------------------|
| 2. "There must be a way for a person to find out what information about the person is in a record and how it is used."  4. "There must be a way for a person to correct or amend a record of identifiable information about the person." | 7. "An individual should have the right: a) to obtain from a data controller confirmation of whether or not the data controller has data relating to him; b) to have communicated to him, data relating to him; d) to challenge data relating to him and to have the data erased, rectified, completed or amended." | VIII. "Individuals should be able to: a) obtain confirmation of whether or not the personal information controller holds personal information about them; b) have communicated to them personal information about them; and, c) challenge [their] accuracy [and] have the information rectified, completed, amended or deleted." | Individual Participation: "DHS should provide mechanisms for appropriate access, correction, and redress regarding DHS's use of PII." | 5. "Consumers have a right to access and correct personal data in usable formats, in a manner that is appropriate to the sensitivity of the data and the risk of adverse consequences to consumers if the data is inaccurate." | Transparency - B. Final Principle: "Companies should provide reasonable access to the consumer data they maintain; the extent of access should be proportionate to the sensitivity of the data and the nature of its use." | continuing on next page |

| <br>Privacy Act (5  | HIPAA (45 CFR  | Gramm-Leach-                                     | PIPEDA (Schedule   | EU Data   | EU General Data  |
|---|--|--|--|---|--|
| USC § 552a)   | §§ 160, 162, 164)  | Bliley Act (15 USC                               | 1) (2000)  | Protection  | Protection   |
| (1974)  | (1996)   | § 6801 et seq., 16<br>CFR §§ 313, 314)<br>(1999) | _, (   | Directive (1995)  | Regulation (2016)  |
| (c) "[Subject to exceptions, e]ach agency shall (3) make [an accounting of disclosures] available to the individual named in the record; and (4) inform any person about any correction"  (d) "Each agency shall (1) [permit an] individual to review the record; | § 164.524(a)(1)  "[Subject to exceptions], an individual has a right of access to inspect and obtain a copy of protected health information"  § 164.526(a)(1)  "An individual has the right to have a covered entity amend protected health information" | N/A  | 4.9 Principle 9: "Upon request, an individual shall be given access to [collected] information. An individual shall be able to challenge the accuracy and completeness of the information and have it amended as appropriate." | Art. 12: "Member States shall guarantee every data subject the right to obtain from the controller: (a) confirmation as to whether or not data relating to him are being processed and information [as] to whom the data are disclosed, communication to him of the data and of any available | Art. 15: 1. "The data subject shall have the right to obtain confirmation as to whether her [data] are being processed 3. The controller shall provide [the] data" Art. 16: "The data subject shall have the right to obtain rectification [and completion of] personal data" Art. 17: 1. "The data subject shall have |
| (2) permit the individual to request amendment of a record"   |  |  |  | information as to their source (b) as appropriate the rectification, erasure or blocking of data"   | the right to erasure of [her] data" Art. 18: "The data subject shall have the right to restric- tion of processing [when certain re-   |

|  |  |  | quirements are met]" |
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| HEW - The Code<br>of Fair<br>Information<br>Practices (1973) | OECD - Privacy<br>Principles (1980)  | APEC - Privacy<br>Framework<br>(2005)  | DHS - Fair<br>Information<br>Practice<br>Principles (2008)   | The White House - Consumer Privacy Bill of Rights (2012)   | FTC - Privacy Framework and Implementation Recommendation (2012)   | 1//                     |
|--|--|--|--|--|--|-------------------------|
| N/A  | 8. "A data controller should be accountable for complying with measures which give effect to the [Privacy] principles" | IX. "A personal information controller should be accountable for complying with measures that give effect to the [APEC Fair Information] Principles" | Accountability and Auditing: "DHS should be accountable for complying with these principles and auditing the use of PII to demonstrate compliance with these principles and all applicable privacy protection requirements." | 7. "Companies should be accountable to enforcement authorities and consumers for adhering to [the Consumer Privacy Bill of Rights]." | Privacy by Design - B. Final Principle: "Companies should maintain comprehensive data management procedures throughout the life cycle of their products and services." | continuing on next page |

| Privacy Act (5           | HIPAA (45 CFR           | Gramm-Leach-       | PIPEDA (Schedule       | EU Data                 | <b>EU General Data</b>  |
|--------------------------|-------------------------|--------------------|------------------------|-------------------------|-------------------------|
| USC § 552a)              | §§ 160, 162, 164)       | Bliley Act (15 USC | 1) (2000)              | Protection              | Protection              |
| (1974)                   | (1996)                  | § 6801 et seq., 16 |                        | Directive (1995)        | Regulation (2016)       |
|                          |                         | CFR §§ 313, 314)   |                        |                         |                         |
|                          |                         | (1999)             |                        |                         |                         |
| <br>(g)(1) "Whenever     | § 160.310(a)            | § 6823(a)          | 4.1. Principle 1:      | Art. 23:                | Art. 5: 2. "The         |
| any agency               | "A covered entity       | "Whoever           | 4.1.3 "An              | 1. "Member              | controller shall be     |
| (C) fails to             | must keep               | knowingly and      | organization is        | States shall            | responsible for,        |
| maintain any             | records and             | intentionally      | responsible for        | provide that any        | and be able to          |
| record concerning        | submit                  | violates, or       | <u>personal</u>        | person who has          | demonstrate             |
| any individual           | <u>compliance</u>       | attempts to        | information in its     | suffered damage         | compliance              |
| with accuracy,           | reports"                | violate, section   | possession             | as a result of an       | with [this              |
| the individual           |                         | 6821 of this title | including              | unlawful                | Regulation]"            |
| may bring a <u>civil</u> | § 164.528(a)(1)         | [on obtaining      | information            | processing              |                         |
| action against the       | "An individual has      | customer           | transferred to a       | operation or of         | Art. 82: 1. "Any        |
| agency"                  | a right to receive      | information by     | third party"           | any act                 | person who has          |
|                          | an <u>accounting of</u> | false pretenses]   | 4.1.4                  | incompatible with       | suffered                |
| (i)(1) "Any officer      | <u>disclosures</u> of   | shall be fined     | "Organizations         | the national            | damage as a             |
| or employee of           | protected health        | or imprisoned for  | shall <u>implement</u> | provisions              | result of an            |
| an agency, who           | information made        | not more than 5    | policies and           | adopted pursuant        | infringement of         |
| willfully                | by a covered            | years, or both."   | practices to give      | to this Directive is    | this Regulation         |
| discloses                | entity"                 |                    | effect to the          | entitled to             | shall have the          |
| material in any          |                         |                    | principles"            | <u>receive</u>          | <u>right to receive</u> |
| manner to                | (42 USC § 1320d-        |                    | 4.10 Principle 10:     | <u>compensation</u>     | <u>compensation</u>     |
| any[one] not             | 5 and 42 USC            |                    | "An individual         | from the                | <u>from the</u>         |
| entitled to              | § 1320d-6 contain       |                    | shall be able to       | controller for the      | controller or the       |
| receive it, shall be     | civil and criminal      |                    | address a              | <u>damage</u>           | processor"              |
| guilty of a              | penalties.) (See        |                    | challenge              | <u>suffered</u> ." (For | (For more, see          |
| misdemeanor"             | also § 160.400 et       |                    | concerning             | more, see Arts.         | Arts. 77–84.)           |
|                          | seq.)                   |                    | compliance with        | 22, 24.)                |                         |
|                          |                         |                    | the                    |                         |                         |
|                          |                         |                    | principles"            |                         |                         |

| HEW - The Code<br>of Fair<br>Information<br>Practices (1973) | OECD - Privacy<br>Principles (1980) | APEC - Privacy<br>Framework<br>(2005) | DHS - Fair<br>Information<br>Practice<br>Principles (2008) | The White House - Consumer Privacy Bill of Rights (2012) | FTC - Privacy Framework and Implementation Recommendation (2012) |                            |
|--|-------------------------------------|---------------------------------------|--|--|--|----------------------------|
| N/A  | N/A                                 | N/A                                   | N/A  | N/A  | N/A  | continuing on<br>next page |

| Privacy Act (5<br>USC § 552a)<br>(1974)  | HIPAA (45 CFR<br>§§ 160, 162, 164)<br>(1996) | Gramm-Leach-<br>Bliley Act (15 USC<br>§ 6801 et seq., 16<br>CFR §§ 313, 314)<br>(1999) | PIPEDA (Schedule<br>1) (2000) | EU Data<br>Protection<br>Directive (1995)  | EU General Data<br>Protection<br>Regulation (2016)   |
|--|--|--|-------------------------------|--|--|
| (o)(1) "No record may be disclosed to a recipient agency or non-Federal agency for use in a computer matching program except pursuant to a written agreement specifying [the purpose and other restrictions]." | N/A  | N/A  | N/A                           | Art. 15:  1. "Member States shall grant the right to every person not to be subject to a decision which produces legal effects and which is based solely on automated processing of data intended to evaluate certain personal aspects relating to him, such as his performance at work, creditworthiness, reliability, conduct, etc." | Art. 22:  1. "The data subject shall have the right not to be subject to a decision based solely on automated processing, including profiling, which produces legal effects or similarly significantly affects [her]." |

| HEW - The Code<br>of Fair<br>Information<br>Practices (1973) | OECD - Privacy<br>Principles (1980) | APEC - Privacy<br>Framework<br>(2005) | DHS - Fair<br>Information<br>Practice<br>Principles (2008) | The White House - Consumer Privacy Bill of Rights (2012) | FTC - Privacy Framework and Implementation Recommendation (2012) |                         |
|--|-------------------------------------|---------------------------------------|--|--|--|-------------------------|
| N/A  | N/A                                 | N/A                                   | N/A  | N/A  | N/A  | continuing on next page |

| Privacy Act (5<br>USC § 552a)<br>(1974) | HIPAA (45 CFR<br>§§ 160, 162, 164)<br>(1996)  | Gramm-Leach-<br>Bliley Act (15 USC<br>§ 6801 et seq., 16<br>CFR §§ 313, 314)<br>(1999) | PIPEDA (Schedule<br>1) (2000) | EU Data<br>Protection<br>Directive (1995) | EU General Data<br>Protection<br>Regulation (2016)  |
|---|---|--|-------------------------------|---|---|
| N/A                                     | § 164.404(a)(1) "A covered entity shall notify each individual whose unsecured protected health information has been, or is reasonably believed to have been, accessed, acquired, used, or disclosed as a result of [a data] breach."  (See generally § 164.400 et seq. for further breach requirements.) | N/A  | N/A                           | N/A                                       | Art. 34:  1. "When the personal data breach is likely to result in a high risk to the rights and freedoms of natural persons, the controller shall communicate the personal data breach to the data subject without undue delay." |

| HEW - The Code<br>of Fair<br>Information<br>Practices (1973) | OECD - Privacy<br>Principles (1980) | APEC - Privacy<br>Framework<br>(2005) | DHS - Fair<br>Information<br>Practice<br>Principles (2008) | The White House - Consumer Privacy Bill of Rights (2012) | FTC - Privacy Framework and Implementation Recommendation (2012) |                         |
|--|-------------------------------------|---------------------------------------|--|--|--|-------------------------|
| N/A  | N/A                                 | N/A                                   | N/A  | N/A  | N/A  | continuing on next page |

| Privacy Act (5<br>USC § 552a)<br>(1974) | HIPAA (45 CFR<br>§§ 160, 162, 164)<br>(1996) | Gramm-Leach-<br>Bliley Act (15 USC<br>§ 6801 et seq., 16<br>CFR §§ 313, 314)<br>(1999) | PIPEDA (Schedule<br>1) (2000) | EU Data<br>Protection<br>Directive (1995) | EU General Data<br>Protection<br>Regulation (2016)  |
|---|--|--|-------------------------------|---|---|
| N/A                                     | N/A  | N/A  | N/A                           | N/A                                       | Art. 20:  2. "The data subject shall have the right to receive the personal data concerning [her and] to transmit those data to another controller without hindrance" |

| HEW - The Code<br>of Fair<br>Information<br>Practices (1973) | OECD - Privacy<br>Principles (1980) | APEC - Privacy<br>Framework<br>(2005) | DHS - Fair<br>Information<br>Practice<br>Principles (2008) | The White House - Consumer Privacy Bill of Rights (2012) | FTC - Privacy Framework and Implementation Recommendation (2012)   |                         |
|--|-------------------------------------|---------------------------------------|--|--|--|-------------------------|
| N/A  | N/A                                 | N/A                                   | N/A  | N/A  | Privacy by Design - Baseline Principle: "Companies should promote consumer privacy throughout their organizations and at every stage of the development of their products and services." | continuing on next page |

| Privacy Act (5<br>USC § 552a)<br>(1974) | HIPAA (45 CFR<br>§§ 160, 162, 164)<br>(1996) | Gramm-Leach-<br>Bliley Act (15 USC<br>§ 6801 et seq., 16<br>CFR §§ 313, 314)<br>(1999) | PIPEDA (Schedule<br>1) (2000) | EU Data<br>Protection<br>Directive (1995) | EU General Data<br>Protection<br>Regulation (2016)   |
|---|--|--|-------------------------------|---|--|
| N/A                                     | N/A  | N/A  | N/A                           | N/A                                       | Art. 25: 1. "The controller shall implement appropriate technical and organizational measures which are designed to implement dataprotection principles [to] protect the rights of data subjects." |

# **Chart 2b: FIPPs Comparison - Self Regulation**

#### A. Data Accuracy, Completeness, Updates

| NAI Code of Conduct<br>(Section II.) (2020)  | AICPA Privacy<br>Management<br>Framework (2020)  | DAA Self-Regulatory<br>Principles for Online<br>Behavioral Advertising<br>(2009) | GSMA Mobile Privacy<br>Principles (2012) |
|--|--|--|--|
| II.F.2. "Members shall conduct appropriate due diligence to help ensure that they obtain data from responsible sources that provide users with appropriate levels of notice and choice." | 8. "The entity maintains accurate, complete and relevant PI for the purposes identified in the notice and protects the representational integrity of the PI in its ongoing interactions with data subjects." | N/A  | N/A                                      |

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| NAI Code of Conduct<br>(Section II.) (2020)   | AICPA Privacy<br>Management<br>Framework (2020)   | DAA Self-Regulatory<br>Principles for Online<br>Behavioral Advertising<br>(2009)   | GSMA Mobile Privacy<br>Principles (2012)   |
|---|---|--|--|
| II.D. [Contains various use limitations for advertisement.]  II.E. [Contains various transfer and service restrictions.]  II.F.4. "Members shall retain DII and PII collected for use in [certain advertising practices] only as long as necessary for the purpose for which the data was collected, to fulfill another legitimate business need, or as required by law." | 2. "The entity offers choices, including purposes for which the entity seeks to obtain and use a data subject's PI."  3. The entity collects and creates PI only for purposes in its agreements and communications with and notices provided to data subjects."  4. "The entity limits the use of PI to the purposes in the formal agreements/notices, and for which [there is] consent."  6. "The entity discloses PI to third parties only for the purposes in agreements and [the] notice and with consent." | IV.B. "Entities should retain data that is collected and used only as long as necessary to fulfill a legitimate business need, or as required by law." | Purpose and Use: "The access, collection, sharing, disclosure and further use of users' personal information shall be limited to meeting legitimate business purposes" |

| NAI Code of Conduct<br>(Section II.) (2020)  | AICPA Privacy<br>Management<br>Framework (2020)  | DAA Self-Regulatory<br>Principles for Online<br>Behavioral Advertising<br>(2009)   | GSMA Mobile Privacy<br>Principles (2012)  |
|--|--|--|---|
| II.B.1. "Each member company [engaged in certain advertising practices] shall provide clear, meaningful, and prominent notice on its website that describes its data collection, transfer, and use practices." (II.B.4. contains a notice requirement for cooperating websites.)  II.C.1. "The level of choice that members must provide is commensurate with the sensitivity and intended use of the data." | 2. "The entity notifies and offers choices when seeking consents, including reasons why and purposes for which the entity seeks to obtain and use PI."  4. "The entity limits the use of PI to the purposes in the formal agreements/notices, and for which a data subject has provided consent."  6. "The entity discloses PI to third parties only for the purposes identified in privacy agreements and notice and with the consent of the data subject." | II.A.1. "Third Parties and Service Providers should give notice that describes their data collection and use practices." (See also II.A.2. and II.B.)  III.A. "A Third Party should provide consumers with the ability to exercise choice with respect to the collection and use [or transfer] of data"  III.B.1. "Service Providers should not collect and use data without Consent."  V. "Entities should obtain Consent before applying any material change to their data | User Choice and Control:  "Users shall be given opportunities to exercise meaningful choice, and control over their personal information."  Respect User Rights: "Users should be provided with information about, and an easy means to exercise, their rights over the use of their personal information." |
|  |  | collection"  |   |

#### D. Data Security, Integrity, Retention

| NAI Code of Conduct<br>(Section II.) (2020)  | AICPA Privacy<br>Management<br>Framework (2020)   | DAA Self-Regulatory<br>Principles for Online<br>Behavioral Advertising<br>(2009)  | GSMA Mobile Privacy<br>Principles (2012)   |
|--|---|---|--|
| II.F.3. "Members that collect, transfer, or store data [for certain advertising purposes] shall provide reasonable security measures to protect that data."  II.F.4. "Members [engaged in certain types of advertising] shall retain DII and PII collected for [these activities] only as long as necessary for the purpose for which the data was collected, to fulfill another legitimate business need, or as required by law." | 4. "The entity retains PI for the time necessary to fulfill the stated purposes identified in the formal agreements/notices or as required by laws or regulations"  7. "The entity protects PI against unauthorized access, removal, alteration, destruction and disclosure (both physical and logical)." | IV.A. "Entities should maintain appropriate physical, electronic, and administrative safeguards to protect the data collected and used for Online Behavioral Advertising purposes." | Security:  "Personal information must be protected, using reasonable safeguards appropriate to the sensitivity of the information."  Data Minimisation and Retention:  "Only the minimum personal information necessary to meet legitimate business purposes should be collected Personal information must not be kept for longer than is necessary for those legitimate business purposes or to meet legal obligations and should subsequently be deleted or rendered anonymous." |

## E. Transparency, Openness, Education

| NAI Code of Conduct<br>(Section II.) (2020)  | AICPA Privacy<br>Management<br>Framework (2020) | DAA Self-Regulatory<br>Principles for Online<br>Behavioral Advertising<br>(2009)  | GSMA Mobile Privacy<br>Principles (2012)   |
|--|---|---|--|
| II.A.2. "Members shall use reasonable efforts to educate users about Tailored Advertising and the choices available with respect to Tailored Advertising." | N/A   | I. "Entities should participate in efforts to educate about Online Behavioral Advertising, including the actors in the ecosystem, how data may be collected, and how consumer choice and control may be exercised." | Openness, Transparency and Notice: "Users shall be provided with information about persons collecting personal information about them, the purposes of an application or service, and about the access, collection, sharing and further use of a users' [sic] personal information, including to whom their personal information may be disclosed"  Education: "Users should be provided with information about privacy and security issues and ways to manage and protect their privacy." |

#### F. Data Access, Correction, Deletion

| NAI Code of Conduct<br>(Section II.) (2020)   | AICPA Privacy<br>Management<br>Framework (2020)  | DAA Self-Regulatory<br>Principles for Online<br>Behavioral Advertising<br>(2009) | GSMA Mobile Privacy<br>Principles (2012) |
|---|--|--|--|
| II.F.1. "Members retaining PII for Tailored Advertising purposes shall provide users with  [r]easonable access to PII, and other information that is associated with PII" | 5. "The entity provides data subjects with access to their PI when requested or when asked to update and correct data errors or make changes." | N/A  | N/A                                      |

## G. Accountability, Liability, Remedies, Auditing

| NAI Code of Conduct<br>(Section II.) (2020) | AICPA Privacy<br>Management<br>Framework (2020)  | DAA Self-Regulatory<br>Principles for Online<br>Behavioral Advertising<br>(2009)                                  | GSMA Mobile Privacy<br>Principles (2012)  |
|---|--|---|---|
| N/A   | 1. "The entity defines, formally documents, communicates and assigns responsibility and accountability for its PI privacy policies and procedures."  9. "The entity monitors compliance with its privacy policies and procedures and has procedures to address privacy-related complaints and disputes." | VII.A. "[E]ntities engaged in Online Behavioral Advertising are within the scope of the accountability programs." | Accountability and Enforcement:  "All responsible persons are accountable for ensuring these principles are met." |

| NAI Code of Conduct<br>(Section II.) (2020) | AICPA Privacy<br>Management<br>Framework (2020) | DAA Self-Regulatory<br>Principles for Online<br>Behavioral Advertising<br>(2009) | GSMA Mobile Privacy<br>Principles (2012) |
|---|---|--|--|
| N/A   | N/A   | N/A  | N/A                                      |
|   |   |  |  |
|   |   |  |  |
|   |   |  |  |
|   |   |  |  |
|   |   |  |  |

Chart 3: Overview of which Framework, Law, and Self Regulation includes which FIPPs

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|                       | Frameworks            |                       |                       |                          | Laws                  |                          |                            |                       |                       |                         | Self Regulation            |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|--------------------------|-----------------------|--------------------------|----------------------------|-----------------------|-----------------------|-------------------------|----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| HEW<br>(1973)         | OECD<br>(1980)        | APEC<br>(2005)        | DHS<br>(2008)         | White<br>House<br>(2012) | FTC<br>(2012)         | Privacy<br>Act<br>(1974) | HIPAA<br>(1996)            | GLB Act<br>(1999)     | PIPEDA<br>(2000)      | EU<br>Direct.<br>(1995) | EU<br>Regul.<br>(2016)     | NAI<br>(2020)         | AICPA<br>(2020)       | DAA<br>(2009)         | GSMA<br>(2012)        |
| -                     | Data<br>Accuracy      | Data<br>Accuracy      | Data<br>Accuracy      | Data<br>Accuracy         | Data<br>Accuracy      | Data<br>Accuracy         | 1                          | -                     | Data<br>Accuracy      | Data<br>Accuracy        | Data<br>Accuracy           | Data<br>Accuracy      | Data<br>Accuracy      | -                     | -                     |
| Purpose<br>Limitation | Purpose<br>Limitation | Purpose<br>Limitation | Purpose<br>Limitation | Purpose<br>Limitation    | Purpose<br>Limitation | Purpose<br>Limitation    | Purpose<br>Limitation      | Purpose<br>Limitation | Purpose<br>Limitation | Purpose<br>Limitation   | Purpose<br>Limitation      | Purpose<br>Limitation | Purpose<br>Limitation | Purpose<br>Limitation | Purpose<br>Limitation |
| Consent               | Consent               | Consent               | Consent               | Consent                  | Consent               | Consent                  | Consent                    | Consent               | Consent               | Consent                 | Consent                    | Consent               | Consent               | Consent               | Consent               |
| Data<br>Security      | Data<br>Security      | Data<br>Security      | Data<br>Security      | Data<br>Security         | Data<br>Security      | Data<br>Security         | Data<br>Security           | Data<br>Security      | Data<br>Security      | Data<br>Security        | Data<br>Security           | Data<br>Security      | Data<br>Security      | Data<br>Security      | Data<br>Security      |
| Trans-<br>parency     | Trans-<br>parency     | Trans-<br>parency     | Trans-<br>parency     | Trans-<br>parency        | Trans-<br>parency     | Trans-<br>parency        | Trans-<br>parency          | -                     | Trans-<br>parency     | Trans-<br>parency       | Trans-<br>parency          | Trans-<br>parency     | -                     | Trans-<br>parency     | Trans-<br>parency     |
| Data<br>Access        | Data<br>Access        | Data<br>Access        | Data<br>Access        | Data<br>Access           | Data<br>Access        | Data<br>Access           | Data<br>Access             | -                     | Data<br>Access        | Data<br>Access          | Data<br>Access             | Data<br>Access        | Data<br>Access        | -                     | -                     |
| -                     | Account-<br>ability   | Account-<br>ability   | Account-<br>ability   | Account-<br>ability      | Account-<br>ability   | Account-<br>ability      | Account-<br>ability        | Account-<br>ability   | Account-<br>ability   | Account-<br>ability     | Account-<br>ability        | -                     | Account-<br>ability   | Account-<br>ability   | Account-<br>ability   |
| -                     | -                     | -                     | -                     | -                        | -                     | Profiling                | -                          | -                     | -                     | Profiling               | Profiling                  | -                     | -                     | -                     | -                     |
| -                     | -                     | -                     | -                     | -                        | -                     | -                        | Data<br>Breach<br>Notific. | -                     | -                     | -                       | Data<br>Breach<br>Notific. | -                     | -                     | -                     | -                     |
| -                     | -                     | -                     | -                     | 1                        | -                     | -                        | 1                          | -                     | 1                     | -                       | Data<br>Portability        | -                     | -                     | -                     | -                     |
| -                     | -                     | -                     | -                     | ı                        | Privacy by<br>Design  | -                        | ı                          | -                     | -                     | -                       | Privacy by<br>Design       | -                     | -                     | -                     | -                     |

| Data<br>Accuracy | Purpose<br>Limitation | Consent          | Data<br>Security | Trans-<br>parency | Data Access      | Account-<br>ability | Profiling        | Data Breach<br>Notification | Data<br>Portability | Privacy by<br>Design |
|------------------|-----------------------|------------------|------------------|-------------------|------------------|---------------------|------------------|-----------------------------|---------------------|----------------------|
|                  | HEW                   | HEW              | HEW              | HEW               | HEW              |                     |                  |                             |                     |                      |
| OECD             | OECD                  | OECD             | OECD             | OECD              | OECD             | OECD                |                  |                             |                     |                      |
| APEC             | APEC                  | APEC             | APEC             | APEC              | APEC             | APEC                |                  |                             |                     |                      |
| DHS              | DHS                   | DHS              | DHS              | DHS               | DHS              | DHS                 |                  |                             |                     |                      |
| White<br>House   | White<br>House        | White<br>House   | White<br>House   | White<br>House    | White<br>House   | White<br>House      |                  |                             |                     |                      |
| FTC              | FTC                   | FTC              | FTC              | FTC               | FTC              | FTC                 |                  |                             |                     | FTC                  |
| Privacy<br>Act   | Privacy<br>Act        | Privacy<br>Act   | Privacy<br>Act   | Privacy<br>Act    | Privacy<br>Act   | Privacy<br>Act      | Privacy<br>Act   |                             |                     |                      |
|                  | HIPAA                 | HIPAA            | HIPAA            | HIPAA             | HIPAA            | HIPAA               |                  | HIPAA                       |                     |                      |
|                  | GLB Act               | GLB Act          | GLB Act          |                   |                  | GLB Act             |                  |                             |                     |                      |
| PIPEDA           | PIPEDA                | PIPEDA           | PIPEDA           | PIPEDA            | PIPEDA           | PIPEDA              |                  |                             |                     |                      |
| EU<br>Directive  | EU<br>Directive       | EU<br>Directive  | EU<br>Directive  | EU<br>Directive   | EU<br>Directive  | EU<br>Directive     | EU<br>Directive  |                             |                     |                      |
| EU<br>Regulation | EU<br>Regulation      | EU<br>Regulation | EU<br>Regulation | EU<br>Regulation  | EU<br>Regulation | EU<br>Regulation    | EU<br>Regulation | EU<br>Regulation            | EU<br>Regulation    | EU<br>Regulation     |
| NAI              | NAI                   | NAI              | NAI              | NAI               | NAI              |                     |                  |                             |                     |                      |
| AICPA            | AICPA                 | AICPA            | AICPA            |                   | AICPA            | AICPA               |                  |                             |                     |                      |
|                  | DAA                   | DAA              | DAA              | DAA               |                  | DAA                 |                  |                             |                     |                      |
|                  | GSMA                  | GSMA             | GSMA             | GSMA              |                  | GSMA                |                  |                             |                     |                      |