

Assessment Industry Standards and Best Practices for the Online Observation of Tests

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Forward

The Association of Test Publishers (ATP) and the National College Testing Association (NCTA) represent two leading organizations dedicated to the advancement and study of testing and assessment. In August 2015, the ATP and the NCTA collaborated to develop a set of Proctoring Best Practices, a guide that identified best practices in Test proctoring, with a focus on proctor responsibilities. As test delivery and administration have grown increasingly complex due to the availability of innovative and fast-evolving new technologies, both organizations recognized the need for more defined industry standards addressing the online observation of tests and encompassing roles beyond that of the proctor, including that of the test sponsor and online observation vendor.

In 2018, the ATP and the NCTA co-sponsored a Joint Technical Working Group (TWG) composed of members of both organizations to research and develop a consensus-based set of standards and best practices for the online observation of tests. To structure and support the effort to develop these materials, the ATP and the NCTA jointly established and approved a development process that was modeled after the American National Standards Institute's (ANSI) protocols and procedures for standard development, such as the *ANSI Essential Requirements: Due process requirements for American National Standards*.

The ATP-NCTA Assessment Industry Standards and Best Practices for Online Observation of Tests ("Standards and Best Practices") provides consensus-based requirements and considerations for the online observation of tests, with or without a proctor. It includes current thinking with regard to fast moving technologies, such as artificial intelligence, biometrics, and advanced algorithms, and evolving regulations such as those regarding privacy and accessibility.

Note from the Co-Chairs

Development of the Standards and Best Practices occurred during a time of rapid change in the assessment industry and across the globe, changes which were compounded by the global upheaval wrought by the COVID-19 pandemic. The rapid expansion of online monitoring as a response to the pandemic allowed students, learners, trainees, and employees to continue to fulfill their educational and professional goals, despite being unable to have consistent access to physical test facilities. During this time, significant learnings emerged regarding online observation. As a result, throughout the course of development of the Standards and Best Practices, the scope and definitions changed several times. Even with the intent to incorporate the most current requirements, recommendations, guidelines, and best practices possible, we have no doubt that some of the information in this version of the document will need to be re-evaluated and updated periodically. Such is the pace of change in learning and assessment technologies today.

The co-chairs wish to thank the prior launch and interim co-chairs for the support, energy, and expertise they provided this project. We also thank ATP and NCTA leadership for their vision in continuing to support this work. Finally, we wish to thank the many volunteers from various testing programs and vendors around the world who provided countless hours of drafting and review to create this document. Without these dedicated professionals, who volunteered personal time both before and during the pandemic, this work would not have been possible.

It is our hope that the Standards and Best Practices will provide meaningful and practical guidance for individuals in the learning and assessment communities. Together, our communities can make meaningful differences in the lives of learners, employees, employers, and their families. Online test observation provides an additional avenue for individuals to access learning and to demonstrate competences through reliable assessments. We are grateful for the opportunity to be part of a community that seeks to serve others and privileged to co-chair the development of these materials.

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93

94

95 Introduction

96 These Standards and Best Practices have been developed with the goal of promoting generally
97 accepted requirements and best practices for the online observation of tests. They were widely
98 contributed to, and peer reviewed by, testing professionals around the world.

99 These Standards and Best Practices address: (a) the online observation of tests with a proctor,
100 and (b) the online observation of tests without a proctor by using technology-based software
101 tools. Where both human and technology-based software tools are used to observe test
102 administrations, these materials can be used together to effectively operate a hybrid model using
103 both a human proctor and technology tools.

104 The ATP and the NCTA recognize that the online observation of assessments, while well over a
105 decade old, is still in the relatively early stages of development, with rapid and continuous
106 technological innovation both enhancing and transforming online observation capabilities.
107 Additionally, online observation providers may adjust their products and services on a more
108 accelerated timeline due to the changing technology landscape and advancements in online
109 education and training. Such fast-paced changes can, within a relatively short time frame, impact
110 these Standards and Best Practices. Accordingly, the Standards and Best Practices are written to
111 describe required procedures and outcomes, and not to describe or prescribe specific
112 technologies or methodologies to achieve those outcomes.

113 These Standards and Best Practices may be used by a variety of test sponsors, such as certification
114 or licensure bodies, online observation providers, proctors, and other interested parties. The
115 objective of the Standards and Best Practices is to provide requirements that outline test sponsor
116 and online observation provider responsibilities and best practices to help ensure the privacy of
117 personal information, test security, and validity of test data resulting from an online observed
118 test. The Sponsors of the Standards recognize that while the nature of individual testing programs
119 is highly variable due to the purposes and contexts for which tests are used, all testing programs
120 generally operate according to broadly similar principles. Therefore, these Standards and Best
121 Practices may be applicable to test administration procedures across a wide variety of programs
122 (e.g., academic admissions, certification, licensure, credentialing, educational course credits,
123 continuing education units) and settings (e.g., professional, educational, employment, clinical).
124 As always, however, the ultimate decision on what observation methods or procedures best suit
125 its tests and testing environment resides solely with the individual test sponsor.

126 The document is designed to allow individuals or entities interested in a specific observation
127 methodology to obtain complete information regarding that methodology, without requiring
128 cross-references to other sections of the document. Thus, a test sponsor interested in using
129 online proctors for observing a test will find relevant standards, notes, and best practices specific
130 to test sponsors contained in Section A. Similarly, an online observation provider offering services
131 without a proctor will find relevant standards, notes, and best practices specific to the online
132 observation provider set forth in Section B. An entity offering a hybrid model using both human
133 proctors and technology-based observation services, will find the relevant information in both
134 Sections A and B. Individuals involved in proctoring, auditing, or launching a test will find relevant
135 standards and information in Section C.

136 Within these Standards and Best Practices, and consistent with ANSI and ISO Directives, the
137 following terminology is used:

- 138 • “shall” indicates a requirement;
- 139 • “should” indicates a recommendation;
- 140 • “may” indicates a permission, and
- 141 • “can” indicates a possibility or a capability.

142 Standards are set forth in grey boxes.

143 Best practices and notes are included throughout this document, and are denoted by an arrow.
144 Best practices will include the “should,” “may,” and “can” terminology.

145 **Scope**

146 The Standards and Best Practices specify requirements and best practices for the online
147 observation of tests. These standards have been organized as follows:

148 **A. Online Observation of Tests with a Proctor**

149 Section 5: Test Sponsor Requirements and Best Practices

150 Section 6: Online Observation Provider Requirements and Best Practices

151 **B. Online Observation of Tests without a Proctor**

152 Section 7: Test Sponsor Requirements and Best Practices

153 Section 8: Online Observation Provider Requirements and Best Practices

154 **C. Requirements and Responsibilities for Proctors, Auditors, and Launchers**

155 Section 9: Requirements and Responsibilities for Proctors

156 Section 10: Requirements and Responsibilities for Auditors

157 Section 11: Requirements and Responsibilities for Launchers

158
159 These Standards and Best Practices do not apply to the software and services for delivering an
160 online Test. While it is possible that the same organization offers software to deliver test content
161 and software to observe the online Test session, these are two distinct activities. Technology-
162 Based Test Delivery Providers, Test Taker management systems, Test Taker registration systems,
163 voucher systems, and credential management platforms are all examples of additional
164 technologies which may impact the Test Taker experience and should be considered as part of
165 the overall testing process, but which are not addressed in this document.

166

167

168 **How to Use this Document**

169 This document is designed so that users can go to a section that defines their role and desired
170 observation method and find a “stand-alone” articulation of the applicable Standards and Best
171 Practices.

172
173 For example, a Test Sponsor interested in offering Online Observation of Tests with a Proctor can
174 go directly to Section A to find relevant information. Similarly, an Auditor providing review
175 services of Test Sessions employing Online Observation of Tests Without a Proctor can go directly
176 to Section C to learn more about an Auditor’s roles and responsibilities in that setting.

177
178 The Committee’s goal in designing the document in this way was to avoid numerous cross-
179 references and searching across the document. While creating these as stand-alone sections
180 results in a longer set of standards, the final document is more user-friendly and less confusing
181 for the individual user.

182 To enhance readability, the document sets forth baseline standards within a grey box. Following
183 certain standards are notes and best practices intended to provide context to the reader. These
184 are distinguished by bullets and include “should,” “may,” and “can” terminology. Taken together,
185 the standards, notes, and best practices provide practical guidance for using online observation
186 methodologies.

187 The Standards and Best Practices assume that the Online Observation Provider is providing the
188 Online Proctor. In the case that Proctors are contracted directly by the Test Sponsor, or that the
189 Online Observation Provider is a subcontractor to a Technology-Based Test Delivery Provider who
190 has contracted directly with the Test Sponsor, the language should be adapted appropriately.
191

192 **Terms and Definitions**

193 For the purposes of this set of standards, the following apply:

194 **3.1 Artificial Intelligence (AI) or AI systems**

195 Hardware and/or software systems that engage in learning, reasoning, or data modeling to reach
196 outcomes. Artificial intelligence includes machine learning and use of advanced algorithmic
197 software to perform tasks such as visual perception, speech recognition, facial recognition, and
198 voice recognition.

199 **3.2 Auditor**

200 An individual responsible for reviewing Online Observation data following completion of the Test
201 Session. The Auditor reviews all or portions of completed records of a Test Session, such as video
202 and audio records or Proctor Irregularity reports.

203 **3.3 Biometric Data**

204 Personal Information resulting from specific technical processing relating to the physical,
205 physiological, or behavioral characteristics of a person which allow or confirm the unique
206 identification of that person.

207 **3.4 Data Anonymization**

208 The irreversible process of removing Personal Information from data sets, so that the individuals
209 whom the data describe can no longer be identified by any means from the data.

210 **3.5 Data Controller (also referred to as a Controller)**

211 An organization which, alone or jointly with others, determines the purposes and means of the
212 collecting and processing of Personal Information. Examples of Data Controllers can be Test
213 Sponsors, bodies that deliver certification Tests, employers who test job applicants, personnel,
214 or educational institutions testing students.

215 **3.6 Data De-Identification**

216 The processing of Personal Information in such a manner as the Personal Information can no
217 longer be connected to a specific individual without the aid of additional information, provided
218 that such additional information is kept separately and is appropriately secured. This process is
219 synonymous with Pseudonymization of data (defined below).

220 **3.7 Data Processor (also referred to as a Processor)**

221 An organization that processes Personal Information on behalf of the Controller. Examples of a
222 Processor is a company that provides online observation services or that provides a platform for
223 delivery of online tests. A Processor may use Sub-Processors.

224 **3.8 In-Person Proctoring**

225 In-Person Proctoring is a real-time process during which a proctor, who is in the same location as
226 the test taker, observes or supervises a test session to ensure the assessment is administered in
227 accordance with defined rules and procedures.

228 **3.9 Irregularity**

229 A nonstandard or unauthorized event occurring during a Test as defined by the Test Sponsor.
230 Irregularities can cover a wide variety of such events, including loss of internet connectivity,
231 power failures, test taker illness, a test taker moving outside of the view of an online observer,
232 an unauthorized individual entering the testing environment, and emergency situations, as well
233 as use of unauthorized testing aids, proxy testing, intellectual property theft, and other security
234 issues.

235 **3.10 Launcher**

236 An individual responsible for launching a Test Taker's exam. A Launcher may also be referred to
237 as a "Greeter." The Launcher is typically responsible for authenticating a Test Taker and checking
238 the Test Taker's digital and physical environment prior to launching the Test. A Launcher is not

239 expected to remain to observe the Test Session in real time. If the individual remains to observe
240 the Test Session, they are defined as a Proctor.

241 **3.11 Online Observation of Tests**

242 The process of using technology to monitor a Test session with or without the synchronous
243 assistance or participation of a human serving as a proctor.

244 **3.12 Online Observation of Tests With a Proctor**

245 The process whereby a proctor uses technology to monitor a Test session in real time. For
246 example, the proctor may use internet connectivity, a webcam, and microphone to observe a
247 Test session. The Test session may or may not be recorded. Examples of Online Observation of
248 Tests With a Proctor include:

- 249 • Observation of tests by a proctor using technology, which may or may not incorporate AI,
250 where both the proctor and the test taker are in the same building but not in the same room.
- 251 • Observation of tests by a proctor using technology, which may or may not incorporate AI,
252 where the proctor is in a separate building than the test taker.
- 253 • Observation of tests using AI or other alerting capabilities, where the proctor receives an alert
254 and thereafter begins real-time observation of the test session using technology. The Test
255 Session may or may not be recorded.

256 **3.13 Online Observation of Tests Without a Proctor**

257 The process of using technology to record a Test session, but no individual is observing the
258 session in real time. The record is retained and available for a period of time after the Test session
259 for an Auditor or other individual to review, as needed. Examples of Online Observation of Tests
260 Without a Proctor include:

- 261 • Observation of tests using technology to record a Test Session and to make the record
262 available to a human reviewer after the event;
- 263 • Observation of tests using technology, which may or may not include AI, to record a Test
264 Session and identify Irregularities, and to make the record and Irregularity results available
265 to a human reviewer after the event; and
- 266 • Observation of tests using technology where a human is initially involved to check-in a test
267 taker to verify identification, set up the testing equipment, or initiate the recording of the
268 test session, and then exits the testing location or test session for the remainder of the event,
269 and the record is made available to a human reviewer after the event.

270 **3.14 Online Observation Provider**

271 An entity that provides Online Observation services. The range of Online Observation services
272 provided can vary, including instances in which the Online Observation Provider:

- 273 • provides the full online observation services, including the technology and Online Proctors;
- 274 • provides the technology, software and administrative support, but contracts with a separate
275 organization to provide the Online Proctors; or

- 276 • provides the technology, software, and administrative support and the Test Sponsor provides
277 the Online Proctors.

278 **3.15 Personal Information**

279 Any information relating to an identified or identifiable natural person. Personal Information may
280 also be referred to as Personally Identifiable Information (“PII”) or Personal Data. In the
281 proctoring context, Personal Information will usually comprise name, demographics, any
282 identification documentation, and video or audio recordings. Whether specific data constitutes
283 Personal Information may depend on the statutory or regulatory schema governing the testing
284 situation. Test questions, scoring algorithms, aggregated, and anonymous data that do not
285 identify any one individual are not usually considered to be Personal Information.

286 **3.16 Processing**

287 Processing means any operation performed on Personal Information, including but not limited
288 to collection, recording, storage, retrieval, transmitting, using or making the Personal Information
289 available.

290 **3.17 Proctor**

291 The authorized individual responsible for observing in real time a Test Session of one or more
292 individual Test Takers. Alternative terms for proctor are invigilator, administrator, observer,
293 room supervisor, remote proctor, online proctor, and e-proctor. A Proctor may monitor either a
294 Technology-Based Test or a paper-based Test. The Proctor may or may not use technology to
295 observe the Test Takers and their environment. In addition, the Proctor may or may not be
296 present in the same room as the Test Taker, and may or may not be required to authenticate the
297 Test Taker and check their digital and physical environment prior to launching a Test.

298 **3.18 Proctoring**

299 Proctoring is a real-time process during which a proctor observes or supervises a test session and
300 intervenes as necessary to ensure the assessment is administered in accordance with defined
301 rules and procedures.

302 **3.19 Pseudonymization**

303 The process whereby personal identifiers are removed from data associated with the persons
304 represented in the data and replaced with artificial identifiers (e.g., token, an alpha-numeric
305 string, or other form of identification), so the data cannot be associated with those persons. A
306 key that links the non-personal identifiers to the persons represented in the data is stored
307 separately from the pseudonymized data so that it can later be used to identify the persons
308 represented in the data, typically after processing of the data is completed. So long as the key is
309 stored separately, pseudonymization provides enhanced privacy protection because, if
310 pseudonymized data is breached, it cannot be associated with identifiable persons.

311 **3.18 Sensitive Personal Information**

312 Any Personal Information that reveals a person’s: (i) social security, driver's license, state
313 identification card, or passport number; (ii) financial account (e.g., debit card/credit card
314 number) in combination with any required security login or access code, password, or credentials
315 allowing access to an account; (iii) precise geolocation; (iv) racial or ethnic origin, religious or
316 philosophical beliefs, or union membership; (v) the contents of mail, email, and text messages
317 unless the data collector is the intended recipient of the communication; (vi) genetic data; (vii)
318 processing of biometric information for the purpose of uniquely identifying the person; (viii)
319 personal information collected and analyzed concerning a consumer's health; (ix) personal
320 information collected and analyzed concerning a person’s sex life or sexual orientation; and (x)
321 personal data from a known child.¹

322 **3.20 Sub-Processor**

323 A Processor who works on behalf of a Processor rather than directly for the Controller. Examples
324 of Sub-Processors could be a data center company providing hosting services to a proctoring
325 service provider, or an information technology company providing cloud storage services to a
326 Processor. Sub-Processors can in turn have Sub-Processors.

327 **3.21 Technology-Based Test**

328 Test administered in a digital form using a digital device. Examples of digital devices include a
329 desktop computer, laptop computer, tablet, or mobile phone. A Technology-Based Test may be
330 taken using a device, in either stand-alone or networked configuration, or delivered by some
331 other technology. During a Technology-Based Test, the Test Taker may access the Test directly
332 via the Internet or through other methods that enable access to the Test without concurrent
333 access to the Internet.

334 **3.22 Technology-Based Test Delivery Provider**

335 An entity that provides the hardware or software to deliver a Technology-Based Test. The
336 Technology-Based Test Delivery Provider may or may not be the same entity as the Online
337 Observation Provider.

338 **3.23 Test**

339 An assessment instrument or tool intended to measure a Test Taker’s knowledge, skill,
340 competence and abilities, among other potential attributes, by one or more means. A Test may
341 also be referred to as an examination, exam, or assessment. The means for measuring may be
342 written, oral, practical, performance-based, or observational, and Test questions may be
343 delivered using verbal, paper-based, or technology-based methods.

344 **3.24 Test Session**

345 A singular instance of a Test.

¹ This definition is based on California and Colorado privacy laws: Cal. Code (§1798.140(ae) under Section 14 of the CCPA as amended) and Colorado Privacy Act (Section 6-1-1303(24)).

346 **3.25 Test Session Data**

347 Information collected regarding an administered Test. Test Session Data may include the system
348 compatibility check, biometric information, candidate attestation, keystroke logging, a Test
349 Irregularity, Test Taker satisfaction survey results, and a Test session recording.

350 **3.26 Test Sponsor**

351 The entity that relies on the Test scores. A Test Sponsor may be the owner, publisher, or user of
352 a specific Test, and may be an academic institution, credentialing body, employer, instructor, or
353 regulatory body.

354 **3.27 Test Taker**

355 An individual being tested. Alternate terms for Test Taker include candidate, examinee, and
356 student.

357

358 **Guiding Principles**

359 **4.0 Introduction to Guiding Principles**

360 The guiding principles set forth below form the foundation for these Standards and Best
361 Practices. Because the Standards and Best Practices cannot address every situation, these
362 principles should serve as a reference when questions arise or as technology advances.

363 **4.1 General Principles**

364 4.1.1 Test administration is a critical aspect of Test validity. Test validity refers to the extent to
365 which a test accurately measures what it purports to measure.

366

367 4.1.2 Technology tools, including hardware and software, used in the administration of Tests,
368 should be evaluated and demonstrated to work as intended prior to use in a Test Session.

369

370 4.1.3 A Test Taker should be given a reasonable opportunity to practice and become familiar
371 with any Test delivery or administration tools before a Test is administered for scoring.

372

373 4.1.4 Test Takers should be informed of the terms and conditions under which the Test will be
374 administered before the Test Session. It is considered a best practice to include this information
375 in a Test Taker agreement or the testing terms and conditions.

376

377 4.1.5 A Test administration should use uniform procedures so that results can be compared to
378 each other.

379

380 4.1.6 A Test administration process should not interfere with Test Taker performance.

381

382 4.1.7 The Test Sponsor is responsible for making the Test accessible to all Test Takers.
383 Accessibility includes making the test available to those who require reasonable accommodations
384 for a physical or mental disability as defined by accessibility laws and regulations, as well as to
385 individuals who may have limited access to internet connectivity, appropriate technology, or a
386 quiet and secure space suitable for Test administration.

387
388 4.1.8 A Test and the Test administration process should not discriminate against Test Takers
389 based on any factor which is irrelevant to the constructs being measured in the Test. This
390 includes, but is not limited to, a prohibition against discriminating on the basis of gender, gender
391 identity, race, color, national origin, disability, sexual orientation, religion, age, or any other
392 factor not relevant to the constructs being measured.

393
394 4.1.9 Because the Online Observation of Tests may create different vulnerabilities in the Test
395 administration process, Test Sponsors should consider holistically how to incorporate such
396 services into their testing program. This includes evaluating test design and length, breaks,
397 administration rules, incident response, and evidence available for investigation.

398
399 4.1.10 If Test Sponsors offer both in-person and online delivery when implementing the Online
400 Observation of Tests, Test Sponsors should regularly evaluate their data to best ensure there is
401 an equivalent and fair test taker experience across all delivery methods.

402

403 **4.2 Test Security Principles**

404 4.2.1 Access to unauthorized information or assistance, whether through individuals, tools,
405 testing aides, or technology during a Test Session, and whether intentional or unintentional,
406 adversely affects the validity of Test results and the security of Test content.

407
408 4.2.2 Recording or otherwise capturing confidential, secure Test content prior to, during or
409 after an authorized Test Session for an unauthorized purpose adversely affects the validity of Test
410 Results and the security of Test content.

411
412 4.2.3 The level of security a Test Sponsor requires for a Test should be commensurate with the
413 level of risk to the intellectual property and associated Test assets and the intended end-use of
414 the Test results.

415
416 4.2.4 Test Sponsors are responsible for using reasonable efforts to deter or mitigate conduct
417 that can reduce the validity of Test results.

418
419 4.2.5 Test Sponsors and Test Proctors have a responsibility to address conflicts of interest.

420
421 4.2.6 Test Sponsors have a responsibility to establish fair policies and procedures for
422 remediating Irregularities, protecting score validity, and preventing other test security concerns.

423 The process for remediating concerns should include an opportunity for Test Takers to appeal
424 any adverse decisions to a human.

425

426 **4.3 Data Privacy Principles**

427 4.3.1 The collection and Processing of a Test Taker’s Personal Information should be limited to
428 the data that are reasonably necessary to deliver services to the Test Taker. The Data Controller
429 is responsible for ensuring that a transparent privacy policy and notice of that policy are readily
430 available to all Test Takers.

431

432 4.3.2 The types and nature of the Test Taker’s Personal Information to be collected, and the
433 purposes for which it will be used, should be disclosed in clear and transparent language to the
434 Test Taker before data collection begins.

435

436 4.3.3 The identity of the Data Controller(s) and how to contact the Data Controller(s) shall be
437 disclosed to the Test Taker.

438

439 4.3.4 It is the responsibility of the Data Controller to obtain informed consent from a Test Taker,
440 or to provide an alternative legal basis to the Test Taker, before Personal Information is collected
441 and processed. Examples of alternative basis may include the Test Sponsor’s performance of a
442 contract, legitimate interest in Processing Personal Information or the public interest in
443 Processing Personal Information.

444

445 4.3.5 The Data Controller should ensure that it is aware of and has established written policies
446 and procedures to comply with applicable data privacy laws and regulations in relevant
447 jurisdictions in which it is administering Tests.

448

449 4.3.6 A Data Controller that Processes Test Takers’ Personal Information, and a Data Processor
450 acting on behalf of the Controller, should have written security plans in place to protect the
451 information. A Processor that is responsible for Processing Personal Information when an
452 incident or breach occurs, should report it to the Controller and otherwise follow the
453 requirements under its contract with the Controller, while the Controller should respond to
454 incidents or breaches when Personal Information is under its control as well as complying with
455 applicable jurisdictional laws and regulations related to reporting any confirmed breach of the
456 Processor.

457

458 4.3.7 The Data Controller and the Processor should have in place technical and organizational
459 measures to protect the security and confidentiality of personal information through established
460 security and privacy controls, such as those provided by NIST or ISO, or through a SOC-2
461 attestation. Security controls should be reviewed on a regular basis.

462

463

464

465 4.3.8 A testing organization should carefully consider whether and how it may be able to De -
466 identify or Pseudonymize any Test Takers' personal information it Processes.²

467

468 4.3.9 Personal Information Processed for administration of a Test Session should only be
469 retained for as long as needed. Different data may be retained for different periods of time.
470 Personal Information should be securely and irretrievably deleted or Anonymized after the
471 applicable retention period is over.

472

² Note that any De-identified or Pseudonymized data is subject to GDPR requirements, whereas Anonymized data is not. Data that is deidentified consistent with California Consumer Privacy Act as amended or similar state privacy laws may not be considered Personal Information.

473 A. Online Observation of Tests with a Proctor

474 5 Test Sponsor Requirements and Best Practices for the Online 475 Observation of Tests with a Proctor

476
477 For ease of review, this section will refer to the Online Observation of Tests with a Proctor as the
478 Online Observation of Tests. The following clauses set forth Test Sponsor responsibilities related
479 to the Online Observation of Tests, with specific focus on Test administration and post-
480 administration.

481
482 Test Sponsors may work with other technology providers during the testing process. Technology-
483 Based Test Delivery Providers, Test Taker management systems, Test Taker registration systems,
484 voucher systems, and credential management platforms are all examples of additional
485 technologies which may impact the Test Taker experience and should be considered by the Test
486 Sponsor as part of the overall testing process. As stated in the Introduction, this set of standards
487 and best practices does not apply to the software and services for delivering an online Test and
488 focuses exclusively on the Online Observation of Tests.

489 490 5.1 Test Sponsor Policies and Procedures

491 5.1.1 The Test Sponsor shall develop, implement, and maintain written policies that promote a
492 standardized, secure, and fair Test experience commensurate with the purpose of the Test.

- 493 ➤ Test Sponsor policies will vary depending on the assessment purpose and the demographics
494 of the testing population. When considering policies for the Online Observation of Tests,
495 policies typically address Test security, such as the requirements for Test Taker
496 authentication and oversight of the Test environment, what aids a Test Taker is allowed to
497 use during the Test, and how Irregularities will be documented, reviewed and resolved.
- 498 ➤ The Test Sponsor should include policies that address requirements for the Proctor, such as
499 requiring an agreement to keep Test content and other information regarding the Test
500 Session confidential, the desired level of training for Proctors, and how many Test Takers a
501 single Proctor is allowed to monitor in the same Session. In addition, policies often address
502 when and how a Test Sponsor may audit any Test Session record, as well as how a Test Taker
503 may challenge a test score or other decision.
- 504 ➤ Test Sponsor policies also should specifically address disability and other accommodations or
505 exemptions available for tests delivered using Online Observation. The Test Sponsor should
506 document the process and timeline for requesting disability-related accommodations in
507 locations where the Test Taker can easily access the information prior to enrolling in the Test.
508 The Test Sponsor should ensure that the information is available in an accessible format, such
509 as following the W3C guidelines if the information is posted on a website.³ Policies related

³ See *Web Content Accessibility Guidelines, (Version 2.1)*, adopted June 5, 2018, <http://www.w3.org/TR/2018/REC-WCAG21-2018-6-5>. Additional recommendations are found in the Editor's Draft, dated Aug. 9, 2018, and in a Working Draft version 3.0, dated December 2021; an Editor's Draft, dated July 2022, is also available and contains four types of tests to determine whether content accessibility recommendations are met.

510 to special accommodations should be integrated into training documents and Test Session
511 scripts.

- 512 ➤ Where feasible, it is also good practice to respect religious or cultural practices of Test Takers.
513 For example, under some circumstances, it may be appropriate to allow a female Test Taker
514 to request a female Proctor due to religious restrictions. Similarly, the Test Sponsor may
515 permit a Test Taker to wear head scarves or other head coverings during the Test Session if
516 head coverings are required by the Test Takers' religion.
- 517 ➤ Test Sponsors should communicate relevant policies, and any exceptions, to the Online
518 Observation Provider. To gauge compliance with Test Sponsor policies, it is recommended
519 that Test Sponsors regularly undergo an internal policy and procedures review as it applies to
520 the Online Observation of Tests with a Proctor. Each organization should define the
521 timeframe for regularly undertaking a review and the policy and process for such review. If
522 AI or biometrics are being used, the AI or biometric algorithms, evidence to support
523 application across demographic groups, and related policies may need to be reviewed more
524 frequently.

525
526 5.1.2 The Test Sponsor shall develop, implement, and maintain written policies regarding the
527 use of testing aids during a Test Session.

- 528 ➤ Testing aids include external calculators, erasable white boards, scratch paper, text books and
529 other materials as well as integrated calculators, highlighters and magnifying tools approved
530 by the Test Sponsor. Before approving use of such aids, Test Sponsors should be mindful of
531 the limited ability to inspect and monitor specific testing aids at all times during the Test
532 Session.

533
534 5.1.3 The Test Sponsor shall develop, implement, and maintain written policies to protect the
535 integrity of the testing process and testing assets before, during, and after the administration of
536 a Test.

- 537 ➤ Common policies for protecting the integrity of the testing process may include rules
538 prohibiting scratch paper, pens, food, or smoking materials in the testing space.

539
540 5.1.4 The Test Sponsor shall develop, implement, and maintain written policies that control the
541 physical testing environment to minimize test security threats during a Test.

- 542 ➤ One of the advantages of delivering a Test using Online Observation is the flexibility to
543 provide Test Takers an option to test outside of a test center while still providing appropriate
544 Test security. Examples of Test environment requirements may include requirements that
545 the Test Taker be alone in the room, that the testing area be free of unauthorized materials,
546 descriptions of the types of suitable testing locations (such as at home or in a library), and the
547 types of unsuitable testing locations (such as a coffee house or inside a vehicle). Test
548 Sponsors should balance the need to provide access to the Test with the need to administer
549 the Test in a secure environment. For example, it may be appropriate to provide some
550 flexibility for Test Takers who are minors, or for Test Takers who are testing in a home
551 environment where disruptions by a family member or pet may occur during the
552 administration of the Test.

553

554 5.1.5 The Test Sponsor shall develop, implement, and maintain written policies to manage the
555 digital testing environment and control for Test security threats during the Online Observation
556 of Tests.

557 ➤ Examples of digital testing environment requirements may include compatible camera
558 technology, microphone, software, or installation of proprietary web browsers, browser
559 extensions, or plug-ins. Test Sponsors should provide public facing information regarding any
560 requirements for the digital testing environment in a manner that can be easily accessed by
561 Test Takers. The more a Test Taker can do in advance to prepare the digital testing
562 environment appropriately, the less likely an incident will arise during the launch or
563 administration of the Test Session that could pose a threat to Test security or to the smooth
564 administration of the Test.

566 5.1.6 The Test Sponsor shall develop, implement, and maintain written policies regarding the
567 requirements to authenticate the Test Taker before and during the Test.

568 ➤ The requirements for Test Taker authentication should be commensurate with the risks
569 associated with any particular Test. For example, a lower stakes Test may approve of self-
570 identification or display of a school identification card that includes a photo, while a higher
571 stakes Test may require a government issued identification card or even biometrics. To
572 ensure Test Takers are prepared to present any required identification information and to
573 respect the privacy rights of Test Takers, Test Sponsors should provide public-facing
574 information regarding Test Taker identification requirements, including the data collected, its
575 purpose, and where it is stored.

576 ➤ Test Sponsor policies related to Test Taker authentication should be integrated into Online
577 Observation Provider training documents and Test Session scripts.

578 ➤ Biometric Data may be used during the Test Taker authentication process. If the Test Taker is
579 authenticated using an automated process incorporating Biometric Data, the Test Sponsor
580 should require human reviewers to verify rejections received from the automated process.

581 ➤ From a user experience, it may be preferable to allow the Test Taker to leverage the
582 Technology-Based Test Delivery Provider's login/SSO/IMS standard to avoid requiring the
583 Test Taker to maintain separate registration and login information from Technology-Based
584 Test Delivery Provider's platform. Test Sponsors should seek to ensure that the security for
585 accessing the platform is sufficient for the stakes of the Test.

587 5.1.7 The Test Sponsor shall develop, implement, and maintain written policies regarding
588 authorized and unauthorized Test Taker breaks during an Online Test.

589 ➤ The Test Sponsor should publish policies on how authorized and unauthorized breaks will be
590 managed. While many programs allow for scheduled breaks, there may be unscheduled
591 breaks that are still permitted by the Test Sponsor. For example, a nursing mother may need
592 an unscheduled break to breast feed or express breast milk. The Test Sponsor should decide
593 in advance how it wants the Online Observation Provider to manage a variety of unscheduled
594 break needs and communicate its acceptable options to the Online Test Provider. The Test
595 Sponsor's policies should be clear on the circumstances in which break times will count
596 against total allotted Test time, and whether or not a Test Taker is allowed to revisit Test
597 questions after returning from a break. Policies should also be clear on whether the Proctor

598 should re-check the Test Taker’s testing environment or re-authenticate the Test Taker after
599 any break. The Test Sponsor should collaborate with the Online Observation Provider to
600 ensure proper Proctor training and documentation is in place to enforce Test Sponsor break
601 policies.
602

603 5.1.8 The Test Sponsor shall develop, implement, and maintain a written plan that specifically
604 addresses risks and Irregularities that may arise when administering a Test using Online
605 Observation of Tests with a Proctor.

- 606 ➤ As with any Test delivery method, the Test Sponsor should have in place a written plan that
607 addresses key risks and Irregularities associated with a Test. There are risks and Irregularities
608 that are unique to the Online Observation of Tests with a Proctor that should be addressed,
609 such as interruptions from children, dogs barking, doorbells ringing, and technology
610 disruptions. The written plan should address how these incidents should be handled and
611 responded to during the Test Session by the Proctor, and how they will be addressed after
612 the Test Session by the Test Sponsor.
- 613 ➤ The written plan should include the investigation process and evidence to be collected and
614 reviewed. For example, in the event of a rule violation, the Test video, indicators of possible
615 Irregularities, and Proctor notes or reports should be reviewed prior to making an outcome
616 determination.
- 617 ➤ Depending on the level of the incident or Irregularities, the written plan should also include
618 expected notice and response times in line with level of urgency and threat to Test integrity
619 or Test Taker privacy. In addition, for higher level matters, the Test Sponsor and Online
620 Observation Provider should have personnel identified to respond to incidents or
621 Irregularities.
- 622 ➤ Test Sponsors should regularly review and update their written plans to ensure they are
623 current.
624

625 5.1.9 The Test Sponsor shall develop, implement, and maintain written policies and procedures
626 for responding to out-of-compliance physical or digital environments, out-of-compliance
627 identification, and unauthorized Test Taker behavior during an Online Test.

- 628 ➤ The Test Sponsor instructions provided to the Online Observation Provider should clearly
629 address how these non-compliant incidents should be handled during the Test Session by the
630 Proctor.
631

632 5.1.10 The Test Sponsor shall develop, implement, and maintain written processes for
633 addressing the use of algorithmic decision-making, such as the use of AI during the Online
634 Observation process. When a negative outcome is recommended by AI during the Online
635 Observation process, the Test Sponsor or its agent shall engage in human review of any negative
636 outcome recommended, at a minimum.

- 637 ➤ The Test Sponsor or its agent should use human review to validate the Online Observation
638 Provider’s data suggesting that an Irregularity may have occurred. If an intervention is taken
639 due to an Irregularity indicator during the Online Observation Process, the Test Sponsor
640 should require that the Proctor log and report that intervention for later review by the Test
641 Sponsor.

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5.2 Test Sponsor Privacy Policies and Best Practices Related to Online Observation

5.2.1 The Test Sponsor shall develop, implement, and maintain written policies and procedures to protect Personal Information, including Sensitive Personal Information, captured during the Online Observation process.

- The Test Sponsors should develop written policies related to securing facilities and systems (such as software, platforms, applications), training personnel, data privacy, data retention, and data destruction.
- Because the laws and regulations protecting Test Taker information can vary by country and state, best practice is to treat all Personal Information with care and be familiar with applicable laws and statutes. The Test Sponsors should identify any data protection standards to which it adheres.
- The Test Sponsor should review its privacy policies and procedures on a regular basis to ensure they are current, clearly written, transparent, and compliant with applicable privacy laws and regulations.
- The Test Sponsor should also ensure that the Online Observation Provider has similar documentation available concerning the protection of Personal Information.

5.2.2 The Test Sponsor shall Process only the minimum amount of Personal Information needed for the functioning, integrity, or security of the Test and the administration of the Test.

- The Test Sponsor should conduct an assessment of the data it collects and identify the purpose and use for the data collected.⁴ The Test Sponsor should collaborate with the Online Observation Provider to identify the type of data needed to observe the Test, report Irregularities, and provide score reports. If the Test Sponsor determines it wants to Process Personal Information for research, it should establish procedures by which it anonymizes or de-identifies that data so that Test Takers' Personal Information is not unnecessarily retained for such purpose(s).

5.2.3 The Test Sponsor shall document the types of Test Taker Personal Information Processed during the testing process and conduct an inventory of that data, including where it is located and in what systems or databases it is processed or stored.

- The Test Sponsor should identify the location of Personal Information, where it is hosted, with whom it is shared, and whether data is transferred across borders.
- The Test Sponsor should contractually require that any third parties used in the testing process, including the Online Observation Provider, accept substantially similar requirements covering their work on behalf of the Controller. Further, the Processor must require the same obligations of any Sub-Processors, including where data storage location, and data transfer should be made available in a transparent manner to the Test Sponsor.

⁴ Given evolving privacy laws and regulations, a Test Sponsor should evaluate its need for specific personal information. The principles of Data Minimization and Purpose Limitation should guide the Test Sponsor in this evaluation to limit the amount of personal information collected, processed, and stored, thereby limiting the organization's risk exposure and legal liability.

681 5.2.4 The Test Sponsor shall identify any Personal Information that is considered “sensitive”
682 under the laws or regulations of jurisdictions in which its Tests are delivered and adopt
683 appropriate procedures for Processing that data.

684 ➤ In some jurisdictions, certain data such as children’s data, biometric data, health data, or data
685 that indicates the race or ethnicity of the Test Taker needs special protection or imposes
686 additional requirements on the Controller if it is collected, which may affect how the
687 Processor handles its Processing. The Test Sponsor should identify such Sensitive Personal
688 Information and ensure it is appropriately protected during Processing.
689

690 5.2.5 The Test Sponsor shall identify the purpose(s) for which Test Taker Personal Information
691 is collected and processed during Testing and clearly provide that information to Test Takers in a
692 transparent manner.

693 ➤ Examples of purpose include collecting Personal Information for the purpose of Test Taker
694 authentication or to report scores following the conclusion of the Test.
695

696 5.2.6 The Test Sponsor shall limit its use of Personal Information to the stated purpose(s) and
697 shall ensure the Online Observation Provider and any Sub-Processor also limit use of
698 Personal Information to the stated purposes.

699 ➤ If the Test Sponsor uses Test Taker Personal Information for other purposes, those new
700 purposes must be disclosed to the Test Taker in a separate notice and meet any jurisdictional
701 legal approvals and requirements.
702

703 5.2.7 The Test Sponsor shall have a written agreement with any Processor that specifically
704 identifies the services the Processor is to provide, including its responsibilities regarding Personal
705 Information, information security, and any cross-border data transfers.
706

707 5.2.8 The Test Sponsor shall document in writing how long different types of Personal
708 Information are retained. After the retention period, or in the event the Test Sponsor stops using
709 a Processor, the Test Sponsor or its agents shall promptly and irrevocably destroy the data or
710 engage in Anonymization of the Data or Data De-Identification.

711 ➤ The Test Sponsor should establish a time period for each type of Personal Information that is
712 the minimum time necessary to hold such data. Some types of data, such as copies of
713 government identity documents, may be retained for less time than other less sensitive data.
714 ➤ Technical measures should be used to ensure the deletion, anonymization of Personal
715 Information is irrevocable or De-identification of data cannot be re-identified.
716

717 5.2.9 The Test Sponsor, as the Data Controller, shall publish a publicly accessible privacy policy,
718 which shall include processes for how Test Takers can exercise their rights related to their
719 Personal Information.

720 ➤ This information should include how Test Takers can access or receive a copy of their Personal
721 Information and processes for how Test Takers can request revisions or deletion of their
722 Personal Information and any circumstances under which such requests may be denied.

723 ➤ Test Sponsors may deny requests for revision or deletion for legitimate reasons. For example,
724 a Test Sponsor may deny a Test Taker’s request to delete Personal information, such as a Test

725 Taker’s video, if the information needs to be retained for a legitimate test security reason
726 (such as an investigation of proxy testing).

727 ➤ Test Takers’ rights related to their Personal Information are determined by applicable laws
728 and regulations.

729

730 5.2.10 The Test Sponsor shall have written policies and procedures related to Test
731 administration that require technological and organizational security measures to be in place
732 to protect Personal Information from destruction, loss, alteration, unauthorized disclosure,
733 unauthorized access, and unauthorized Processing, including:

734 a) Requiring Test Taker’s Personal Information to be encrypted at rest and encrypted or
735 otherwise securely protected in transit;

736 b) Limiting access to Personal Information to only those individuals whose duties require
737 such access; and

738 c) Requiring that Personal Information collected during the Test Session be returned,
739 destroyed, or anonymized after the retention period or at the termination of any vendor
740 agreement.

741 ➤ Test Sponsors should be familiar with and follow technical practices for ensuring the
742 confidentiality, integrity, and availability of Personal Information. For example, the Test
743 Sponsor should restrict access to Personal Information to only authorized individuals,
744 following the principle of least privilege when it pertains to user access. The Test Sponsor
745 should maintain policies regarding role-based access and permitted activities, such as “read
746 only,” and be familiar with applicable information security standards.

747 ➤ Test Sponsors should follow the principles of Privacy by Design and Privacy by Default in their
748 process and system design. Privacy by Design and Default is an approach to systems
749 development that requires data protection be taken into account throughout the
750 development process. These terms may have specific meanings in different jurisdictions. For
751 example, in some jurisdictions these concepts include not only the development of systems
752 but also Processing activities.

753 ➤ The Test Sponsor should conduct regular internal security reviews to ensure the appropriate
754 protection of Personal Information.

755

756 5.2.11 The Test Sponsor shall provide annual training in data privacy and information security to
757 its personnel with authorized access to Test Taker Personal Information. The Test Sponsor shall
758 maintain evidence of, and records of, the training.

759 ➤ The Test Sponsor should provide training in accordance with applicable regulations, such as
760 the Family Educational Rights and Privacy Act (“FERPA”) in the United States, the Personal
761 Information Privacy Law (“PIPL”) in China, or GDPR in the European Union. Training should
762 include requirements for categorizing, accessing and protecting sensitive data and Personal
763 Information, as well as training concerning the legal requirements of confidentiality and the
764 importance of maintaining chain of custody documents.

765 ➤ Employee acknowledgments for protecting Personal Information should be a component of
766 annual privacy training. The Test Sponsor should periodically assess personnel to check their
767 understanding of such training.

768

769 **5.3 Biometrics and Artificial Intelligence.**

770

771 Biometric technology can be used to improve upon the accuracy of human verification of identity.
772 For example, an identity can be established from a biometric capture against an identity
773 document, and then used to assure that a Test Taker remains the same individual throughout the
774 testing process. This identification could occur using facial recognition, fingerprints, iris scans or
775 other physical characteristics that, when independent or pieced together, can be used to identify
776 an individual against a claimed identity.

777

778 Laws regulating the governing the Processing of Biometric Data vary across regions, and new laws
779 and regulations continue to be enacted. A Test Sponsor should consider in what jurisdiction it is
780 operating to fully appreciate the rights and obligations of the parties involved in collecting and
781 Processing Biometric Data. For example, under GDPR Biometric Data are considered sensitive or
782 specially protected data and requires heightened protection, including express consent by the
783 individual with the right to withdraw consent at any given time. In some jurisdictions, where a
784 photograph is used to confirm Test Taker identification, the photograph may be considered
785 Biometric Data. Given the sensitivity and strict treatment of Biometric Data in the EU, Test
786 Sponsors delivering Tests in Europe may wish to provide other options, disable use of Biometric
787 Data, or otherwise ensure that Test Takers can choose not to provide Biometric Data without
788 adverse consequences.

789

790 AI systems and processes rely upon algorithms that can predict patterns in data. AI systems can
791 be used in multiple ways during the Online Observation of Tests, including identifying aberrant
792 Test Taker or Proctor behaviors based on video or audio data, or determining if other
793 Irregularities occur in the testing process or environment that can be identified for human review.

794

795 While AI systems and processes can help augment human observations, AI can result in and
796 perpetuate bias. Three categories of bias have been identified: algorithmic prejudice (which
797 arises when there are correlations between protected features and other factors); negative
798 legacy bias (which stems from bias in the training data); and underestimation (which occurs when
799 the data used to train the system is imbalanced, resulting in bias against a defined class). Because
800 of the potential for bias and discrimination when implementing AI, use of AI in testing has come
801 under additional scrutiny from the public and from regulators. Laws regulating the use of AI are
802 continuing to evolve and expand around the world. To remain up to date, Test Sponsors should
803 regularly reference the laws and regulations in the localities in which their Test Takers are
804 located, and where their Tests are administered, for guidance on use of AI.

805

806 **5.3.1 If Biometric Data are captured during the Test administration process, the Test Sponsor**
807 **shall ensure the Biometric Data are used only for the stated purpose and any related**
808 **security measures and retention periods for Biometric Data are followed.**

809 ➤ Test Sponsors should regularly monitor the use of any Biometric Data and remediate if bias
810 or discrimination is found or likely to occur.

811 ➤ Test Sponsors should request the Online Observation Provider to submit bias or
812 discrimination evidence regarding the use of Biometric Data and require the Online

813 Observation Provider to monitor the tool on an ongoing basis to ensure any bias or
814 discrimination remains limited and mitigated.

815

816 5.3.2 The Test Sponsor shall provide written notice to Test Takers regarding the Processing of
817 Biometric Data during the Test administration process, how the Biometric Data will be
818 used, and the retention period for the Biometric Data.

819 ➤ Notice provided by the Test Sponsor should clearly describe the purpose of Processing
820 Biometric Data. For example, Biometric Data may be used for Test Taker authentication or
821 security of the Test and Test Session. Notice may also include explanations of how reference
822 information was obtained, how the sample/claim information was obtained, the basic chain
823 of Biometric Data Processing (detection, qualification, template generation, matching,
824 decision), cooperative use expectations, and fall-back processes.

825 ➤ In addition, in many jurisdictions, Test Sponsors must also obtain express written consent
826 from Test Takers before collecting Biometric Data and allow the Test Taker to withdraw their
827 consent at any time unless there is another legal ground for Processing Biometric Data such
828 as applicable law that allows its continued use.

829

830 5.3.3 If Artificial Intelligence is used during the Test administration process to identify an
831 Irregularity, the Test Sponsor shall require evidence that the Artificial Intelligence has
832 been trained and tested to mitigate the potential for bias or discrimination.

833 ➤ It is important for Test Sponsor's to evaluate and monitor the AI tools utilized in Online
834 Observation and limit or mitigate any bias. Monitoring should occur on an on-going basis, as
835 bias could be introduced over time based on the data experienced by the algorithm. As noted
836 in the introduction, bias evidence may describe the documentation of metadata measured
837 and indicating how bias was assessed, the measures of inequity in training or testing data,
838 the methods used to mitigate data inequity (architectural or training), measures taken to
839 mitigate group bias, especially in the data labelling phase, and any measures of inequity in
840 system performance.

841

842 5.3.4 The Test Sponsor shall provide notice to Test Takers regarding the use of AI or automated
843 decision-making employed during the Test administration process.

844 ➤ Test Sponsors shall disclose any use of AI or automated decision-making that has the potential
845 for a serious impact on the individual as well as how Test Takers can appeal a negative
846 decision to a human reviewer. This requirement does not require Test Sponsors to disclose
847 its Intellectual Property or Intellectual Property rights or provide such details that a Test Taker
848 can work-around security but should include a high-level explanation of the use of automated
849 decision-making or AI employed during the Test administration process to inform Test Takers
850 about how such technology is used.

851

852 5.3.5 If AI or automated decision-making tools are used during the Test administration process
853 to identify suspected Irregularities, the Test Sponsor shall develop processes that enable
854 human review of any decisions made as a result of using AI or automated decision-
855 making tools during the Online Observation process.

856 ➤ Test Sponsors are required to disclose any automated decision, whether or not rendered by
857 AI, that has the potential for serious impact on an individual and the process for appealing
858 that decision to a human reviewer. The Test Sponsor should enable human review or audit of
859 any data associated with an Irregularity indicator generated by AI, whether initially or through
860 challenge escalation to human review. While a Test Sponsor can delegate the responsibility
861 to review data generated by AI to the Online Observation Provider, final adjudication of a
862 decision must remain with the Test Sponsor.

863 **5.4 Pre-Contracting and Contracting Considerations with the Online Observation Provider**

864 The business and contracting structure for delivering a Test using Online Observation may vary.
865 For example, a Test Sponsor may work directly with an Online Observation Provider, or may work
866 with a Technology-Based Test Delivery Provider who also offers Online Observation. This section
867 is intended to address both scenarios.

870 5.4.1 Prior to entering into an agreement for the Online Observation of Tests, the Test Sponsor
871 shall conduct due diligence to understand the business structure of the entity providing
872 the Online Observation services and obtain information about its technology,
873 operations, policies, and practices.

- 874 ➤ Pre-contracting due diligence is important to help the parties better understand the others’
875 needs, align expectations, and come to a clear agreement as to their respective
876 responsibilities. It is common for both parties to share information during this process. It is
877 recommended that a mutual non-disclosure agreement be in place prior to sharing
878 confidential or sensitive business information.
- 879 ➤ During the pre-contracting phase, the Test Sponsor should share information with, and obtain
880 information from, the entity providing the Online Observation services to enable all parties
881 to align their respective responsibilities and expectations in providing services to Test Takers.
- 882 ➤ The Test Sponsor should communicate to the Online Observation Provider its requirements
883 regarding data privacy, accommodations, testing environment, Test Taker identification, and
884 security measures.
- 885 ➤ To help ensure a positive Test Taker experience, the Test Sponsor should further share
886 information about the various systems involved in the testing process so the parties can
887 better understand how those systems will integrate with the Online Observation services. For
888 example, other systems may include Learning Management Systems, Learning Tools
889 Interoperability (LTI), Application Programming Interface (API) integrations, or Technology-
890 Based Test Delivery integrations. Test Sponsors should also ask about how the Online
891 Observation Provider collects feedback from Test Takers regarding their experiences. Test
892 Sponsors should also ask what information the Test Sponsor will need to provide for each
893 Test Session and in what format the information will be shared.
- 894 ➤ Test Sponsors should be prepared to share additional information with the Online
895 Observation Provider if requested during this pre-contracting stage. For example, the Test
896 Sponsor should be prepared to share information concerning its corporate structure and
897 whether it is currently delivering Tests using Online or In-Person Proctors.

- 898 ➤ During due diligence, it is also important for the Test Sponsor to understand the business
899 structure and financial position of the entity or entities providing the Online Observation
900 services and Processing any Test Taker data. This will enable the Test Sponsor to better
901 understand the responsibilities of each party and ensure the correct party or parties are
902 included in the agreement.
- 903 ➤ The Test Sponsor's due diligence should also include the Online Observation Provider's
904 policies and practices related to Processing Test Taker Personal Information. Such due
905 diligence may also include a privacy risk assessment by the Test Sponsor, with assistance from
906 the Online Observation Provider, to assess the impact the Online Observation Provider's
907 procedures may have on Test Sponsor's ability to meet applicable privacy laws and
908 regulations. The Test Sponsor should ask the contracting entity to define the geographical
909 locations in which Test Taker Personal Information is stored or moved across territorial
910 boundaries by the Online Observation Provider or the Technology-Based Test Delivery
911 Provider. This will help the Test Sponsor to properly include contractual obligations in the
912 agreement to protect Test Taker Personal Information and confidential data. Similarly, the
913 Test Sponsor should inquire regarding the contracting entity's ability to securely collect,
914 process, and store Test Taker Personal Information and other confidential data.
- 915 ➤ The Test Sponsor should seek to understand from the Online Observation Provider the
916 specific technical interactions of its methodology, such as use of collaboration technology,
917 browser plug-ins, browser extensions or client applications (.exe or dmg file types). The Test
918 Sponsor should also request information regarding protocols, procedures, and tools used
919 during the Test Session to observe the Test Taker and take actions either before or during
920 launching the Test to ensure they are consistent with the Test Sponsor's written policies. For
921 example, the Test Sponsor should inquire whether the Online Observation Provider can use
922 technology to prevent the Test Taker from gaining access to information outside the testing
923 environment and if it uses or can offer algorithmic methods to monitor Test Takers and
924 identify potential Irregularities.
- 925 ➤ The Test Sponsor may also desire information about Proctor language capabilities,
926 communication skills, and training. It should also seek additional information regarding the
927 requirements for Proctor equipment, such as the minimum screen sizes for Proctors, the
928 Proctor to Test Taker ratios available, and the security measures required for Proctor
929 equipment.
- 930 ➤ The Test Sponsor should ascertain from the Online Observation Provider the disaster
931 recovery and business continuity plans and redundancies in place to address emergency
932 situations that may occur at the Online Observation Provider's main site(s) or in the event of
933 technological attempts to disrupt service. These plans should also ensure confidentiality, data
934 security, and data integrity in the event of an emergency. This may include but not be limited
935 to disruption of a key service or main site(s).

936
937 5.4.2 The Test Sponsor shall enter into a written agreement with the provider of Online
938 Observation services.

- 939 ➤ As noted above, this agreement may be directly with the Online Observation Provider or with
940 a Technology-Based Test Delivery Provider who then enters into a separate agreement with
941 the Online Observation Provider. The agreement should address the business arrangement

942 between the parties including, among other things, the following topics as they relate to the
943 Online Observation of Tests:

- 944 • Test Session requirements, including but not limited to the Test Sponsor’s
945 specifications concerning Test Taker authentication, device and environmental
946 requirements, allowed testing aids, and Test Taker conduct;
- 947 • Security and data privacy requirements, including distinguishing between the
948 responsibilities and liabilities for the Data Controller and Data Processor;
- 949 • Test Taker and Online Proctor technology system requirements and technology
950 protocols to prevent access to unauthorized information;
- 951 • Average Test Taker to Proctor ratios and the maximum number of Test Takers each
952 Proctor will monitor concurrently;
- 953 • Proctor training and conduct requirements;
- 954 • Support for Test Takers;
- 955 • Online Proctor reporting and performance metrics;
- 956 • Online Proctor assignment and conflict of interest requirements;
- 957 • Audit rights, indemnification and insurance obligations, if any;
- 958 • Data storage, retention and destruction requirements; and
- 959 • Business continuity and incident response requirements.

960 ➤ Test Sponsors should communicate with vendors what relationships or situations may
961 constitute a conflict of interest and are required to be reported to the Test Sponsor should
962 they arise.

963 ➤ During the term of the contract, the Test Sponsor and contracting entities should conduct
964 periodic meetings to ensure procedural and technical requirements are being met.

965 ➤ The Test Sponsor may also wish to specify the Online Observation Provider’s requirement to
966 provide software release notes or an accessible change log of software revisions, as well as
967 documented “roll back” processes in the event a new software release is not working as
968 designed.

970 **5.5 Pre-Test Communications with the Test Taker regarding the Online Observation of Tests** 971 **with a Proctor**

972 5.5.1 The Test Sponsor shall provide publicly accessible information concerning the Online
973 Observation of Tests with a Proctor, including:

- 974 a) the Test Takers’ rights and responsibilities, including the hardware and software
975 specifications required for the Test Session and the testing environment requirements
976 the Test Taker is responsible for providing;
- 977 b) testing day rules, testing protocols, and authorized Test Taker behaviors, including Test
978 Taker Authentication requirements, and whether algorithmic methods, such as AI, are
979 used during the Online Observation process;
- 980 c) accessibility compliance, including how to apply for accommodation requests; and
- 981 d) the Test Sponsor’s privacy policy.

982 ➤ The Test Sponsor should provide information and guidance to Test Takers in understanding
983 what technical and equipment needs must be met in order to take the Test, such as a
984 functioning computer, camera, microphone and acceptable internet connection.

- 985 ➤ The Test Sponsor should offer this information in multiple locations. For example, the Test
986 Sponsor should provide Test Taker technology requirements on its website as well as during
987 the registration process, or publish the Test rules on its website, display them during the
988 registration process, and summarize them online or through the Proctor prior to the start of
989 the Test Session.
- 990 ➤ Ideally, Test Takers should be given access to this information and the agreement prior to the
991 Test Session to allow time for review.
- 992 ➤ Test Sponsors should consider alternative options for accessibility compliance when it comes
993 to test administration. For example, Test Sponsors who require testing at Test Centers may
994 need to offer at home testing with Online Observation to accommodate Test Takers who can
995 demonstrate that it is a reasonable accommodation for their disability. In the same way, Test
996 Sponsors who offer a Test using Online Observation may need to accommodate Test Takers
997 at a Test Center if they can demonstrate that it is a reasonable accommodation for their
998 disability. Test Sponsors should provide public facing information regarding special
999 accommodations and procedures for requesting such accommodations. Examples of
1000 accommodations specific to the Online Observation of Tests with a Proctor may include
1001 policies and procedures for extended time, frequent breaks, or permitting a Test Taker to
1002 have water in a clear glass on the desk during the Test.
- 1003 ➤ The Test Sponsor’s privacy policy should clearly identify who is the Controller(s) of the Test
1004 Taker’s Personal Information and how to contact the Controller(s) to raise questions, issues,
1005 or concerns, and how to make requests about Personal Information under applicable privacy
1006 laws and regulations.

1008 5.5.2 The Test Sponsor shall provide the Test Taker with the opportunity to become familiar
1009 with the Online Observation process.

- 1010 ➤ Because Online Observation may be new to some Test Takers, it is helpful to provide
1011 opportunities for the Test Taker to become familiar with the process prior to the Test.
- 1012 ➤ Ideally, the Test Taker should have the ability to check the hardware and software
1013 requirements prior to registering for the Test or prior to a Test Session. In addition, an online
1014 tutorial, instructions, or simulated practice test may be offered to assist the Test Taker in
1015 becoming familiar with the Online Observation process.
- 1016 ➤ Where Test Taker accommodations include use of assistive technology, the Test Taker ideally
1017 should be allowed to assess the assistive technology, such as closed captioning or screen
1018 reader tools, to ensure it works with the Online Observation system. Note, however, that
1019 compatibility with the online observation system does not ensure compatibility with the Test
1020 driver or Test content.

1022 5.5.3 Prior to the Test, the Test Sponsor shall ensure Test Takers agree to the Test rules, the
1023 requirements of participating in the Test, and the Online Observation of their Test with a
1024 Proctor.

- 1025 ➤ The agreement should include an acknowledgement that the Test Sponsor has a legal basis
1026 for Processing Test Taker Personal Information and capture explicit consent to the collection
1027 and Processing of Sensitive Personal Information.

- 1028 ➤ Among other things, the agreement should include Test day rules, protocols, and authorized
1029 Test Taker behaviors. The agreement should also set forth the Test Taker authentication
1030 requirements and nondisclosure obligations. Test Takers should agree to not disclose
1031 confidential Test content.
- 1032 ➤ The agreement should also include clear ownership of data and systems, as well as rights for
1033 investigation, score or credential suspension or revocation, retest rules, and prosecution.
- 1034 ➤ The Test Sponsor should also obtain the Test Taker’s explicit consent to the collection and
1035 Processing of their Sensitive Personal Information, such as the capture of Biometric Data and
1036 video recordings of their image and the room where they are testing.

1037

1038 **5.6 Administration and Post-Administration Activities**

1039 5.6.1 The Test Sponsor shall ensure processes are in place for the Online Observation Provider
1040 to promptly notify the Test Sponsor in the event of a significant incident, as defined by
1041 the Test Sponsor’s incident response plan.⁵

- 1042 ➤ A significant incident may include failure of the Online Observation Provider system or a data
1043 breach. A Test Sponsor should consider the service level agreements, such as time to respond
1044 or notice requirements, to include in the incident response plan.
- 1045 ➤ The Test Sponsor should take action as defined within its internal policies and procedures
1046 when a significant event has been reported.

1047

1048 5.6.2 The Test Sponsor shall review reports and data provided by the Online Observation
1049 Provider to identify incidents or Irregularities that warrant additional action by the Test
1050 Sponsor.

- 1051 ➤ Additional data may include Proctor reports, Irregularity indicators, video or audio
1052 recordings, and response strings.

1053

1054 5.6.3 The Test Sponsor shall notify the Online Observation Provider of any data that must be
1055 preserved and retained or transmitted to the Test Sponsor for additional action.

⁵ Throughout the Standards, the term “incident response plan” is used to describe how the Online Observation Provider should deal with Test Irregularities. It is important to note that a clear distinction exists between a response for Test Session Irregularities (whether those of a technical or operational nature, such as power outages, computer system failures, or those that may be related to the integrity of a testing event, such as discovery of a proxy test taker, test takers talking to one another, unauthorized discussions with a proctor, unauthorized sharing of test items), as compared with a Test Sponsor or Online Observation Service Provider’s response to technical security incidents or data breaches, that impact the security of a data systems or databased, such as unauthorized access to or disclosure of data or compromise of the entity’s systems, which may affect the test administration at any time (pre-administration, during test administration, or post-administration). This distinction is consistent with the separate terms as used in the “Guidelines for Technology-Based Assessment” as published by the ATP and the International Test Commission (“ITC”) (2022). Indeed, the term “Security Incident Response” is defined in the “Guidelines” as: “Actions taken by a testing organization in response to a security incident using a pre-set written response plan to investigate what happened, determine if a data breach occurred, and any remediation steps that should be taken” (TBA, 2022, page 144). Accordingly, users of the Online Observation Standards need to be careful to distinguish between “Test Irregularities” including a response plan developed by a Test Sponsor and an Online Observation Service Provider to respond to such Test Irregularities, and an Information Security Incident Response Plan developed by an entity to handle investigations and remediations of technical security breaches.

1056 ➤ This may include recorded video or audio files from the Test Session and Proctor notes. Only
1057 authorized staff should have access to data collected in response to an Irregularity or other
1058 investigation.
1059

1060 5.6.4 The Test Sponsor shall require confirmation from the Online Observation Provider that it is
1061 deleting confidential data and Personal Information in accordance with agreed retention and
1062 destruction plans.

- 1063 ➤ The Test Sponsor should have a data retention policy that sets forth how it is using, storing,
1064 and destroying confidential information, such as Testing manuals and other business data,
1065 and a similar data retention policy for Personal Information, including Sensitive Personal
1066 Information. The Online Observation of Tests should be part of those policies.
1067 ➤ The Test Sponsor should work with the Online Observation Provider to ensure the parties'
1068 requirements are aligned and require confirmation on a regular basis from the Online
1069 Observation Provider that it is providing secure and timely removal of Personal Information
1070 from all Online Observation systems, including local systems used by the Proctor and other
1071 vendor personnel, in accordance with the Test Sponsor's agreement or instructions.
1072 ➤ The Test Sponsor may desire to regularly audit the Online Observation Provider to ensure
1073 adherence to its data retention and destruction policies.
1074

1075 **6 Online Observation Provider Requirements and Best Practices for** 1076 **the Online Observation of Tests with a Proctor** 1077

1078 For ease of review, this section will refer to the Online Observation of Tests with a Proctor as the
1079 Online Observation of Tests. The following clauses set forth the Online Observation Provider's
1080 activities and responsibilities related to the Online Observation of Tests, with specific focus on
1081 Test administration and post-administration.
1082

1083 It is not uncommon for the Test Sponsor to contract directly with a Technology-Based Test
1084 Delivery Provider who in turn subcontracts with another entity to provide Online Observation
1085 services. To the extent the Online Observation Provider is a subcontractor to a Technology-Based
1086 Test Delivery Provider, these sections should be adapted accordingly.
1087

1088 As stated in the Introduction, this set of standards and best practices does not apply to the
1089 software and services for delivering an online Test. While it is possible that the same organization
1090 offers software to both deliver and observe an online Test, these are two distinct activities, and
1091 the following clauses focus exclusively on the Online Observation Provider's activities and
1092 responsibilities. Online Observation Providers may work with other technology providers to
1093 administer a Test. Technology-Based Test Delivery Providers, Test Taker management systems,
1094 Test Taker registration systems, voucher systems, and credential management platforms are all
1095 examples of additional technologies which may impact the Test Taker experience and should be
1096 considered as part of the overall testing process.
1097

1098 **6.1 Online Observation Provider Policies and Procedures**

1099 6.1.1 The Online Observation Provider shall develop, implement, and maintain written
1100 procedures to implement the Online Observation Policies that were mutually agreed
1101 upon with the Test Sponsor.

- 1102 ➤ Typically, these procedures include Proctor training, Test rules, Irregularity reporting, and
1103 security incident response activities that align with the Test Sponsor requirements.
1104

1105 6.1.2 The Online Observation Provider shall develop, implement, and maintain written
1106 procedures to enforce mutually agreed-upon Test Sponsor requirements regarding the
1107 use of testing aids during a Test session.

- 1108 ➤ The Online Observation Provider should train Proctors to understand the types of testing aids
1109 that may be permitted and how rules may vary across different testing programs or Test
1110 Sponsors.
1111

1112 6.1.3 The Online Observation Provider shall develop, implement, and maintain written
1113 procedures to enforce mutually agreed upon security policies as they relate to the Online
1114 Observation of Tests with a Proctor.

- 1115 ➤ The Online Observation Provider shall develop and implement appropriate written
1116 procedures and training to protect the integrity of the testing process and intellectual
1117 property assets of the Test Sponsor. All operational staff, support staff, and Proctors should
1118 understand the Online Observation requirements that may be unique to each Test.
1119 ➤ Security audits should be conducted periodically by both Test Sponsors and Online
1120 Observation Providers to confirm the appropriate procedures are routinely followed.
1121

1122 6.1.4 The Online Observation Provider shall develop, implement, and maintain written
1123 procedures to implement and enforce mutually agreed upon requirements that control
1124 the physical environment to minimize test security threats during the Online Observation
1125 process.

- 1126 ➤ The scan of the Test Taker environment should address the risks associated with that Test.
1127 The Online Observation Provider should work with the Test Sponsor to develop a process that
1128 is appropriate for the use of the Test results and that can be properly implemented using
1129 online tools.
1130

1131 6.1.5 The Online Observation Provider shall develop, implement, and maintain written
1132 procedures for enforcing mutually agreed upon requirements that manage the digital
1133 testing environment and control for test security threats during the Online Observation
1134 process.

- 1135 ➤ The Online Observation Provider may, for example, monitor the Test Taker device to identify
1136 the applications running on the device.
1137

1138 6.1.6 The Online Observation Provider shall develop, implement, and maintain written
1139 procedures for enforcing mutually agreed upon requirements to authenticate the Test
1140 Taker before and during the Test.

- 1141 ➤ The Test security measures, including Test Taker authentication, for an Online Test should
1142 address the risks associated with that specific Test. The Online Observation Provider should
1143 work with the Test Sponsor to develop a process that is appropriate for the use of the Test
1144 results and that can be properly implemented using online tools.
- 1145 ➤ Biometric Data may be used during the Test Taker authentication process. If the Test Taker is
1146 authenticated using an automated process incorporating Biometric Data, the Online
1147 Observation Provider’s process should involve human reviewers to verify rejections received
1148 from the automated process. This human review should occur as close to the decision point
1149 as possible.
- 1150 ➤ From a user experience, the Online Observation Provider may be asked to build an integration
1151 to leverage the Technology-Based Test Delivery Provider’s login/SSO/IMS standard to avoid
1152 requiring the Test Taker to maintain separate registration and login information from the
1153 Technology-Based Test Delivery Provider’s platform.

1155 6.1.7 The Online Observation Provider shall develop, implement, and maintain written
1156 procedures for enforcing mutually agreed upon requirements regarding authorized and
1157 unauthorized Test Taker breaks, including additional security measures the Online
1158 Proctor must take, if any, after an authorized or unauthorized break.

- 1159 ➤ If the Test Sponsor allows for authorized breaks during specific times in the Test, ideally
1160 the Test content should be obscured from view during the authorized break to protect
1161 the content. In that case, the Online Observation Provider should have technical
1162 capabilities in place to plan for the start and stop of the authorized break. After the break,
1163 the technical capabilities should allow for a clear point in proceeding back into the Test.
- 1164 ➤ In addition, after any type of break, the Online Observation Providers should require the
1165 Test Taker to perform an additional room scan and re-authenticate the individual
1166 returning from break.
- 1167 ➤ If the Test Sponsor allows the Test Taker to also take unplanned breaks, the Online
1168 Observation Provider should confirm with the Test Sponsor what type of breaks warrant
1169 an Irregularity indicator, whether and what type of breaks count against the timed Test
1170 Session, and whether and what type of breaks should result in ending the Test Session, if
1171 any.

1173 6.1.8 The Online Observation Provider shall develop, implement, and maintain written
1174 procedures to enforce mutually agreed upon policies for responding to and documenting
1175 out-of-compliance physical or digital environments, out-of-compliance identification, and
1176 unauthorized Test Taker behavior.

- 1177 ➤ If a Proctor intervenes in the Test Session, such as by terminating a Test if a Test Taker begins
1178 receiving assistance from a roommate during the Test, the Online Observation Provider
1179 should require the Proctor to log and report that intervention for review by the Test Sponsor.

1181 6.1.9 The Online Observation Provider shall ensure Proctors enforce differing Test Sponsor
1182 requirements during simultaneous Test Sessions.

- 1183 ➤ Having a Proctor observe Tests with the same testing rules can avoid confusion or mistakes
1184 regarding rule enforcement. Just as with in-person test center proctoring, however, that may

1185 not always be the case. Online Observation Providers should train Proctors on any differences
1186 across Test Sponsors' requirements and how to handle multiple Test administration rules and
1187 procedures. It is ideal if Proctors may be assisted by technology for this as well, such as by
1188 automating access to rules or auto-highlighting differences from standard procedures. It is
1189 considered a best practice for Online Observation Providers to implement a quality control
1190 program that allows for a feedback loop to Proctors to improve performance and support
1191 continuous improvement.

1192
1193 6.1.10 The Online Observation Provider shall develop, implement, and maintain written
1194 procedures for providing mutually agreed-upon disability and other accommodations,
1195 such as religious exceptions, during the Online Observation process.

- 1196 ➤ Online Observation Providers should only provide those accommodations or exceptions
1197 approved by the Test Sponsor.
- 1198 ➤ Online Observation Providers should assess and update their products and materials to meet
1199 current accessibility standards requirements and best practices. Examples of common Test
1200 Taker accommodations include:
 - 1201 • Granting extended time to test;
 - 1202 • Allowing use of chat for communication;
 - 1203 • Permitting use of screen readers;
 - 1204 • Permitting a human reader to read out loud instructions and items verbatim;
 - 1205 • Allowing a scribe to document Test Taker response verbatim;
 - 1206 • Allowing a personal care assistant (not acting in a role as a reader or scribe) to accompany
1207 the Test Taker;
 - 1208 • Allowing a Test Taker to read questions out loud;
 - 1209 • Allowing a service dog in the testing room;
 - 1210 • Allowing additional or off-camera breaks;
 - 1211 • Permitting the use of medications or oxygen during the Test;
 - 1212 • Allowing the Test Taker to have stretch breaks on camera;
 - 1213 • Permitting the Test Taker to perform diabetic testing;
 - 1214 • Permitting the Test Taker to consume food and beverage during the Test
- 1215 ➤ Proctor training should include the different types of common accommodation requests and
1216 how to support them when approved.
- 1217 ➤ Agreed upon accommodation instructions and Test Session scripts should be readily available
1218 to the Proctor before engaging with the Test Taker.

1219
1220 6.1.11 The Online Observation Provider shall have written policies and procedures in place to
1221 document, record, and store Test Taker's Test Session data in accordance with Test
1222 Sponsor agreements.

- 1223 ➤ Regular reviews and audits should be undertaken to ensure proper enforcement of the
1224 collection and retention of Test Session Data as agreed between the Test Sponsor and Online
1225 Observation Provider terms under the agreement.

1227 6.1.12 Where the Online Observation Provider collects payment for the Testing session, the
1228 Online Observation Provider or any third-party collecting payment on their behalf shall
1229 ensure its policies and procedures are Payment Card Industry compliant.

1230 ➤ Agreements between the Online Observation Provider and Test Sponsor should outline
1231 responsibilities and terms for collection and exchange of payments between Test Takers and
1232 the collecting party. A vendor that provides payment systems should provide evidence that
1233 its policies, procedures, and systems are Payment Card Industry compliant, if requested.
1234

1235 6.2 Online Observation Provider Privacy Policies and Best Practices

1236 6.2.1 The Online Observation Provider shall develop, implement, and maintain written policies
1237 and procedures to protect Personal Information, including Sensitive Personal
1238 Information, captured and Processed during the Online Observation process.

1239 ➤ The Online Observation Provider as a Data Processor must follow applicable legal regulations
1240 and the instructions provided by the Controller, unless it has agreed to be a Controller or Co-
1241 Controller and is subject to those Controller legal requirements.

1242 ➤ As a Controller or Co-Controller, the Online Observation Provider should implement
1243 protection measures related to securing facilities, training personnel, and data privacy and
1244 protection, retention, and destruction.

1245 ➤ Because the laws and regulations protecting Test Taker information can vary by country and
1246 state, best practice is to treat all Personal Information with care and be familiar and comply
1247 with applicable laws and regulations. The Online Observation Provider should identify any
1248 data protection standards to which it adheres.

1249 ➤ The Online Observation Provider should review its policies and procedures on a regular basis
1250 to ensure they are current, clearly written, transparent, and compliant with applicable privacy
1251 laws and regulations.
1252

1253 6.2.2 The Online Observation Provider shall Process only the minimum amount of Personal
1254 Information needed for the functioning, integrity, and security of the Online Observation
1255 process.

1256 ➤ Data exchange of Personal Information to and from the Online Observation Provider should
1257 include only data needed for the functioning, integrity, or security of the Online Observation
1258 process. This may include, but is not limited to, the integrity and security of the Test, support
1259 of the Test Taker, or performance of the Online Observation platform.
1260

1261 6.2.3 The Online Observation Provider and any Sub-Processor shall document the Personal
1262 Information Processed during the Online Observation process, and conduct an inventory
1263 of that data, including where the Personal Information is located, and in what systems or
1264 databases it is Processed or stored.

1265 ➤ The Online Observation Provider should identify and document the location(s) in which
1266 Personal Information is stored by the Online Observation Provider and/or the Sub-Processor,
1267 where it is hosted, with whom it is shared, and whether the data is transferred across borders.

- 1268 ➤ If Personal Information is stored or moved across borders, the Online Observation Provider
1269 should obtain documentation stating that the Test Sponsor or other Controller has authorized
1270 the transfer and that the data exchange procedures meet applicable legal requirements.
1271 ➤ Processing should align with applicable laws and regulations, as well as Controller
1272 instructions. The Online Observation Provider should require that any Sub-Processors accept
1273 substantially similar obligations.
1274

1275 6.2.4 The Online Observation Provider and any Sub-Processor shall identify any Personal
1276 Information that is considered “sensitive” under the laws or regulations of jurisdictions in
1277 which Test Takers are located during the Test Session and adopt appropriate procedures
1278 for Processing that data.

- 1279 ➤ In some jurisdictions, certain data, such as children’s data, Biometric Data, health data, or
1280 data that indicates the race or ethnicity of an individual, needs special protection or imposes
1281 additional requirements that may affect how it is Processed. For example, in some
1282 jurisdictions, this type of data may be Processed only with the express consent of the Test
1283 Taker. The Online Observation Provider should identify any Sensitive Personal Information
1284 and appropriately protect it during Processing.
1285

1286 6.2.5 The Online Observation Provider shall maintain and publish a compliant privacy policy
1287 that clearly identifies the purpose(s) for which it Processes the Personal Information of
1288 users of its products or services.

- 1289 ➤ The Online Observation Provider must clearly disclose the purposes for which it Processes
1290 Test Taker Personal Information, which may include providing technical support, improving
1291 processes, enhancing the user experience, or improving the technology.
1292 ➤ Example of “purpose” may be collecting Personal Information for the purpose of Test Taker
1293 authentication or to ensure the appropriate Test is given to the appropriate Test Taker.
1294

1295 6.2.6 The Online Observation Provider shall limit its use of Personal Information to the stated
1296 purpose(s) and ensure any Sub-Processor also limits use of Personal Information to the
1297 stated purpose(s).

- 1298 ➤ If the Test Sponsor uses Test Taker Personal Information for other purposes, those new
1299 purposes must be disclosed to the Test Taker in a separate notice and meet any jurisdictional
1300 legal approvals and requirements.
1301

1302
1303 6.2.7 The Online Observation Provider shall have a written agreement with the Controller that
1304 specifically identifies the services the Online Observation Provider will provide, including
1305 the parties’ responsibilities regarding the collection and Processing of Personal
1306 Information, information security, and any cross-border data transfers.
1307

1308 6.2.8 The Online Observation Provider shall document in writing how long different types of
1309 Personal Information are retained. After the retention period, or in the event the Test
1310 Sponsor stops using an Online Observation Provider as a Data Processor, then the Online

1311 Observation Provider shall return, destroy, or anonymize the Personal Information it
1312 holds relating to that Test Sponsor per the terms of the agreement between the parties.

- 1313 ➤ Where the Online Observation Provider is acting as a Processor, it should follow the retention
1314 periods required by the Test Sponsor.
- 1315 ➤ Where the Online Observation Provider is acting as a Controller, it should document in writing
1316 how long different types of Personal Information are retained. The time period for retaining
1317 each type of Personal Information should be the minimum time necessary to hold that data.
1318 Some types of data, such as copies of government identity documents, can be retained for
1319 less time than other less sensitive data.
- 1320 ➤ Technical measures should be used to ensure the deletion or Anonymization of Personal
1321 Information is irrevocable. The Test Sponsor may permit the Data Processor to retain data if
1322 it has been properly De-identified and cannot be re-identified.

1323
1324 6.2.9 Where the Online Observation Provider is acting as a Processor, it shall have a written
1325 policy for coordinating with and following the instructions from the Test Sponsor in the
1326 event a Test Taker submits a request to the Online Observation Provider concerning the
1327 Test Taker’s Personal Information. Where the Online Observation Provider is also a
1328 Controller, it shall publish a publicly accessible privacy policy that addresses Test Taker
1329 requests regarding Personal Information and any circumstances under which requests
1330 may be denied.

- 1331 ➤ The Online Observation Provider should follow the instructions provided by the Controller for
1332 handling Test Taker data requests. For example, the Test Sponsor may instruct the Online
1333 Observation Provider to acknowledge receipt of a data request and then forward the request
1334 directly to the Controller for decision.
- 1335 ➤ Where the Online Observation Provider is also a Controller, it should implement processes to
1336 address Test Takers’ rights related to their Personal Information, including how a Test Taker
1337 can access or receive a copy of their Personal Information or request revisions or deletion of
1338 their Personal Information, as well as any circumstances under which such request may be
1339 denied. For example, a request to delete Personal Information may be denied if the data
1340 needs to be retained for legitimate reasons, such as an investigation.
- 1341 ➤ Test Takers’ rights related to their Personal Information are determined by applicable laws
1342 and regulations.

1343
1344 6.2.10 The Online Observation Provider shall have written policies and procedures that require
1345 technological and organizational security measures to be in place to protect Personal
1346 Information from destruction, loss, alteration, unauthorized disclosure, unauthorized
1347 access, and unauthorized Processing, including:

- 1348 a) Requiring a Test Taker’s Personal Information to be encrypted at rest and encrypted or
1349 otherwise securely protected in transit;
- 1350 b) Limiting access to Personal Information to only those individuals whose duties require
1351 such access; and
- 1352 c) Requiring that Personal Information collected during the Test Session be returned,
1353 destroyed, or anonymized after the retention period or at the termination of the

1354 agreement with the Test Sponsor in accordance with Test Sponsor’s policies or
1355 instructions.

- 1356 ➤ Online Observation Providers should be familiar with and follow the technical practices for
1357 ensuring the confidentiality, integrity, and availability of Personal Information. For example,
1358 the Online Observation Provider should restrict access to Personal Information to only
1359 authorized individuals, following the principle of least privilege when it pertains to user
1360 access. It should also maintain policies regarding role-based access and permitted activities,
1361 such as “read only,” and be familiar with applicable information security standards.
- 1362 ➤ Online Observation Providers should follow the principles of Privacy by Design and Privacy by
1363 Default in their process and system design. This is an approach to systems development that
1364 requires data protection be taken into account throughout the development process. These
1365 terms have specific meanings in different jurisdictions. For example, in some jurisdictions
1366 these concepts include not only the development of systems but also Processing activities.
- 1367 ➤ Online Observation Providers should conduct regular internal security reviews to ensure the
1368 appropriate protection of Personal Information.
- 1369 ➤ Where practical, Personal Information captured during the Online Observation process
1370 should be held in a De-identified or Psuedonymized form.

1371
1372 6.2.11 The Online Observation Provider shall provide the Test Taker with the ability to end a Test
1373 Session at any time and to remove, deactivate, or uninstall any Online Observation
1374 technology placed on the Test Taker’s personal device, and make such information
1375 publicly available to the Test Taker.

- 1376 ➤ Removal of the Online Observation technology should return the Test Taker’s personal device
1377 to its initial state. Removal should not create any security risks on the Test Taker’s device.

1378
1379 6.2.12 The Online Observation Provider shall provide annual training in data privacy and
1380 information security to its personnel with authorized access to Personal Information. The
1381 Online Observation Provider shall maintain evidence of, and records of, the training.

- 1382 ➤ Data privacy training should be provided to any personnel with access to Personal
1383 Information, including but not limited to Proctors.
- 1384 ➤ Training should include applicable regulations, such as FERPA in the United States, PIPL in
1385 China, or GDPR in the European Union. Training should also include requirements for
1386 categorizing, accessing and protecting Personal Information and Sensitive Personal
1387 Information as well as the legal requirements of confidentiality and the importance of
1388 maintaining chain of custody documents.
- 1389 ➤ Employee acknowledgments for protecting Personal Information should be a component of
1390 annual privacy training. The Online Observation Provider should periodically assess personnel
1391 to check their understanding of such training.

1392 1393 **6.3 Biometrics and Artificial Intelligence**

1394 Biometric technologies can be used to improve upon human verification of identity. For example,
1395 an identity can be established from a biometric capture against an identity document and then
1396 used to assure that a Test Taker remains the same individual throughout the Test session. The

1397 identification could occur using facial recognition, fingerprints, iris scans, or other physical
1398 characteristics that, when independent or pieced together, can be used to identify an individual
1399 against a claimed identity.

1400 Laws regulating the governing the Processing of Biometric Data vary across regions, and new laws
1401 and regulations continue to be enacted. An Online Observation Provider should consider in which
1402 jurisdiction it is operating in order to fully appreciate the rights and obligations of the parties
1403 involved in collecting and Processing Biometric Data. For example, under GDPR Biometric Data
1404 are considered sensitive data and requires heightened protection, including express consent by
1405 the individual with the right to withdraw consent at any given time. In some jurisdictions where
1406 a photograph is used to confirm Test Taker identification, the photograph may be considered
1407 Biometric Data. Given the sensitivity and strict treatment of Biometric Data in the EU, Test
1408 Sponsors delivering Tests in Europe may wish to provide other options, disable use of Biometric
1409 Data, or otherwise ensure that Test Takers can choose not to provide Biometric Data without
1410 adverse consequences.

1411
1412 AI systems and processes rely on algorithms that can predict patterns in data. AI systems can be
1413 used in multiple ways during the Online Observation of Tests, including identifying aberrant Test
1414 Taker or Proctor behaviors based on video or audio data or determining if other Irregularities
1415 occur in the testing environment that can be identified for human review.

1416 While AI systems and processes can help augment human observations, AI can result in and
1417 perpetuate bias. Three categories of bias have been identified: algorithmic prejudice (which
1418 arises when there are correlations between protected features and other factors); negative
1419 legacy bias (which stems from bias in the training data); and underestimation (which occurs when
1420 the data used to train the system is imbalanced, resulting in bias against a defined class). Because
1421 of the potential for bias and discrimination when implementing AI, use of AI in testing has been
1422 under additional scrutiny from the public and from regulators. Laws and regulations governing
1423 the use of AI are continuing to evolve and expand around the world. To remain up to date, Online
1424 Observation Providers should regularly reference the laws and regulations in the localities in
1425 which their Test Takers are located as well as those in which they administer Tests for guidance
1426 on the use of AI.

1427 6.3.1 If Biometric Data are captured during the Online Observation process, the Online
1428 Observation Provider shall ensure the Biometric Data are used only for the stated purpose, any
1429 related security measures are in place, and Biometric Data are retained only as long as agreed
1430 upon between with the Test Sponsor.

- 1431 ➤ Online Observation Providers should regularly monitor Processing of Biometric Data and
1432 remediate if bias or discrimination is found or likely to occur.
- 1433 ➤ The Online Observation Provider should be prepared to provide evidence to Test Sponsors
1434 that the Online Observation Provider has monitored the use of Biometric Data and taken
1435 steps to mitigate bias or discrimination found, if any. Bias evidence may describe the
1436 documentation of metadata measured and indicating how bias was assessed, the measures
1437 of inequity in training or testing data, the methods used to mitigate data inequity

1438 (architectural or training), measures taken to mitigate group bias, especially in the data
1439 labelling phase, and any measures of inequity in system performance.

1440

1441 6.3.2 The Online Observation Provider shall provide written notice to Test Takers regarding the
1442 Processing of Biometric Data during the Online Observation process, how the Biometric Data will
1443 be used, and the retention period for the Biometric Data.

1444 ➤ The Online Observation Provider is often acting as a Processor and collecting Biometric Data
1445 on behalf of the Test Sponsor. In some instances, it may also be acting as a Controller.

1446 ➤ Notice provided by the Online Observation Provider should clearly describe the purpose for
1447 collecting Biometric Data. For example, Biometric Data may be used for Test Taker
1448 authentication or security of the Test and Test Session. Notice may also include explanations
1449 of how reference information was obtained, how the sample/claim information was
1450 obtained, the basic chain of Biometric Data Processing (detection, qualification, template
1451 generation, matching, decision), cooperative use expectations, and fall-back processes.

1452 ➤ In several jurisdictions, the Controller, or the Online Observation Provider if acting on behalf
1453 of the Controller, must also obtain express written consent from Test Takers before collecting
1454 Biometric Data and allow the Test Taker to withdraw their consent at any time unless there
1455 is another legal ground for Processing Biometric Data such as applicable law that allows its
1456 continued use.

1457

1458 6.3.3 If Artificial Intelligence is used during the Test Session to identify a suspected Irregularity,
1459 the Online Observation Provider shall compile evidence that the Artificial Intelligence has
1460 been trained and tested to mitigate bias and discrimination.

1461 ➤ The Online Observation Provider should evaluate and monitor AI tools it uses in Online
1462 Observation and to limit or mitigate any bias. Monitoring should occur on an ongoing basis,
1463 as bias can be introduced over time based on the data experienced by the algorithm. As
1464 noted in the introduction, bias evidence may describe the documentation of meta-data
1465 measured and indicating how bias was assessed, the measures of inequity in training or
1466 testing data, the methods used to mitigate data inequity (architectural or training), measures
1467 taken to mitigate group bias (especially in the data labelling phase), and any measures of
1468 inequity in system performance.

1469 ➤ The Online Observation Provider should be prepared to provide evidence to Test Sponsors
1470 that it has monitored the use of AI and taken steps to mitigate bias or discrimination found,
1471 if any.

1472

1473 6.3.4 If Artificial Intelligence or automated decision-making tools are used during the Online
1474 Observation process to identify suspected Irregularities, the Online Observation Provider
1475 shall develop processes that enable human review of any decisions made as a result of
1476 using AI or automated decision-making tools during the Online Observation process.

1477 ➤ The Test Sponsor shall disclose any automated decision, whether or not rendered by AI, that
1478 has the potential for serious impact on an individual and the process for appealing that
1479 decision to a human reviewer. The Test Sponsor can delegate this responsibility to the Online
1480 Observation provider. Thus, the Online Observation Provider should enable human review
1481 or audit of any data associated with an Irregularity indicator generated by AI, whether

1482 initially, where feasible, or through challenge escalation to human review. Final adjudication
1483 of a decision remains with the Test Sponsor.
1484

1485 **6.4 Pre-Contracting and Contracting Considerations with the Test Sponsor or Technology-**
1486 **Based Test Delivery Provider**

1487 The business and contracting structure for delivering a Test using Online Observation may vary.
1488 For example, an Online Observation Provider may work directly with a Test Sponsor or may work
1489 as a subcontractor to a Technology-Based Test Delivery Provider who has entered into a direct
1490 agreement with a Test Sponsor. This section is intended to address both scenarios.

1491 **6.4.1** Prior to entering into an agreement for the Online Observation of Tests, the Online
1492 Observation Provider shall respond to any due diligence requests from the Test Sponsor
1493 and seek to understand the Test observation needs of the Test Sponsor as well as its
1494 corporate structure.

- 1495 ➤ Pre-contracting due diligence is important to help the parties better understand the others'
1496 needs, align expectations, and come to a clear agreement as to their respective
1497 responsibilities. It is common for both parties to share information during this process. It is
1498 recommended that a mutual non-disclosure agreement be in place prior to sharing
1499 confidential or sensitive business information.
- 1500 ➤ During the pre-contracting phase, the Online Observation Provider should be prepared to
1501 respond to Test Sponsor questions regarding its business structure, financial situation, and
1502 business operations, as well as that of any Sub-Processor(s). The information requested may
1503 include where the organization is incorporated, where its primary place of business is located,
1504 where its proctors are located, and how they are trained. This will enable the parties to align
1505 their respective responsibilities and expectations in providing services to Test Takers and
1506 ensure the correct parties are subject to the agreement.
- 1507 ➤ The Online Observation Provider should be prepared to respond to questions about where
1508 Test Taker Personal Information is located, its data privacy and security standards, and other
1509 relevant policies and procedures. This may also include a request to conduct a privacy risk
1510 assessment to better understand the impact the Online Observation Provider's procedures
1511 may have on the Test Sponsor's ability to meet applicable privacy laws and regulations. This
1512 will help the parties properly include contractual obligations in the agreement to protect
1513 Private Information.
- 1514 ➤ The Online Observation Provider should provide the technical interactions of its software
1515 methodology, such as use of collaboration technology, browser plug-ins, browser extensions
1516 or client applications (.exe or dmg file types). It should also provide information regarding the
1517 protocols, procedures, and tools used during the Test Session to observe the Test Taker and
1518 take actions before or during the Test, and any algorithmic or biometric capabilities used by
1519 the Online Observation Provider.
- 1520 ➤ The Online Observation Provider should be prepared to provide information concerning
1521 Proctor language capabilities, communication skills, and training, as well as information
1522 regarding the requirements for Proctor equipment, such as the minimum screen sizes for

1523 Proctors, the Proctor to Test Taker ratios available, and the security measures required for
1524 Proctor equipment.

1525 ➤ In many jurisdictions, Test Sponsors are legally required to provide Test accommodations to
1526 individuals with a disability. The Online Observation Provider should be prepared to explain
1527 the types of accommodations it can effectively provide. For example, extended time and
1528 additional breaks are common requests for testing accommodations that can be effectively
1529 provided and managed during the Online Observation of Tests. In addition, due to religious
1530 requirements, some Test Takers may request that a Proctor of the same gender conduct a
1531 check-in process that includes removal of religious headwear. The Online Observation
1532 Provider should be prepared to share with the Test Sponsor the ability to easily accommodate
1533 that type of request.

1534 ➤ The Online Observation Provider should be prepared to respond to questions about its
1535 disaster recovery plan and business continuity processes. The Online Observation Provider
1536 should be prepared to make copies of key written policies available to the Test Sponsor upon
1537 request.

1538 ➤ This is also an opportunity for the Online Observation Provider to understand the
1539 organizational and operational structure of the Test Sponsor and the Test Sponsor's unique
1540 needs. For example, it is important to understand the business structure of the entity or
1541 entities requesting Online Observation services. This will enable the Online Observation
1542 Provider to ensure that the appropriate parties are included in the agreement.

1543 ➤ In addition, the parties should discuss the testing volume anticipated, length of each Test,
1544 and in what format data will be exchanged. Further, Online Observation Providers should
1545 inquire regarding the dates or date ranges needed for Test delivery and what Test Sponsor
1546 roles need access to the Online Observation data.

1547 ➤ The Online Observation Provider also should ask about the various systems involved in the
1548 testing process so the parties can better understand how those systems will integrate with
1549 the Online Observation services. For example, other systems may include LMS or CMS
1550 platforms, LTI integrations, API integrations, or Technology-Based Test Delivery integrations.
1551 The Online Observation Provider should also discuss how the parties will collect feedback
1552 from Test Takers regarding their experience, and what information the Test Sponsor will
1553 provide for each Test Session and in what format the information will be shared. This will
1554 help ensure a positive Test Taker experience and secure exchange of data.

1555 ➤ The Online Observation Provider should be prepared to advise the Test Sponsor on Online
1556 Observation risks and mitigation strategies. For example, the Online Observation Provider
1557 can point out the potential risk of a Test Taker using a cell phone to capture Test content, and
1558 the possibility for the Proctor to intervene by either pausing or ending the Test in the event
1559 a Test Taker is observed using a cell phone.

1560
1561 **6.4.2 The Online Observation Provider shall enter into a written agreement for Online
1562 Observation Services with the Test Sponsor.**

1563 ➤ As noted above, this agreement may be directly with the Test Sponsor, or with an
1564 intermediate such as a Technology-Based Test Delivery Provider who has a separate
1565 agreement with the Test Sponsor. The agreement should address the business arrangement

1566 between the parties including, among other things, the following topics as they relate to the
1567 Online Observation of Tests:

- 1568 • Test Session requirements, including but not limited to the Test Sponsor’s specifications
1569 concerning Test Taker authentication, device and environmental requirements, allowed
1570 testing aids, and Test Taker conduct;
 - 1571 • Security and data privacy requirements, including distinguishing between the
1572 responsibilities and liabilities for the Data Controller and Data Processor;
 - 1573 • Test Taker and Online Proctor technology system requirements and technology protocols
1574 to prevent access to unauthorized information;
 - 1575 • Average Proctor-to-Test Taker ratios and the maximum number of Test Takers each
1576 Proctor will monitor concurrently;
 - 1577 • Proctor training and conduct requirements;
 - 1578 • Support for Test Takers;
 - 1579 • Online Proctor reporting and performance metrics;
 - 1580 • Online Proctor assignment and conflict of interest requirements;
 - 1581 • Audit rights, indemnification, and insurance obligations, if any;
 - 1582 • Data storage, retention and destruction requirements; and
 - 1583 • Business continuity and incident response requirements.
- 1584 ➤ During the term of the contract, the Online Observation Provider should conduct periodic
1585 meetings with the Test Sponsor (or Technology-Based Test Delivery Provider) to ensure
1586 procedural and technical requirements are being met.
- 1587 ➤ The Online Observation Provider should be prepared to discuss with the Test Sponsor how
1588 release notes or updates to the software will be communicated.
1589

1590 **6.5 Pre-Test Communications with the Test Taker regarding Online Observation**

1591 6.5.1 The Online Observation Provider shall provide publicly accessible information to the Test
1592 Taker, including:

- 1593 a) the Test Takers’ rights and responsibilities regarding use of the Online Observation
1594 Provider website and system, including describing how the Online Observation Provider’s
1595 technology interacts with the Test Taker’s computer hardware;
- 1596 b) the Test Takers’ responsibilities to provide equipment that meets the hardware and
1597 software specifications required for the Test Session and internet connectivity at a
1598 minimum bandwidth;
- 1599 c) Any applicable Artificial Intelligence methods used or Biometric Data gathered during the
1600 Online Observation Process;
- 1601 d) Instructions for account creation, if required;
- 1602 e) Customer support contact information; and
- 1603 f) Instructions for ending a test and for removing, deactivating or uninstalling any Online
1604 Observation technology.

1605 ➤ As an example, the Online Observation Provider’s information concerning the technological
1606 specifications may include requiring the Test Taker have a computer, camera, microphone,
1607 and adequate internet connection.

- 1608 ➤ The Online Observation Provider ideally should offer information in multiple locations, such
1609 as publishing it on its website and displaying it prior to the start of the Test Session.
1610 ➤ Where possible, Test Taker’s should be provided this information prior to the Test Session to
1611 allow time for review.

1612
1613 6.5.2 If the Online Observation Provider is a Controller or Co-Controller, communication to the
1614 Test Takers shall include, in simple language, the Online Observation Provider’s privacy
1615 policy.

- 1616 ➤ The Online Observation Provider’s privacy policy should clearly identify the Online
1617 Observation Provider’s role, instructions for how to contact the Controller(s) of Personal
1618 Information, instructions for how to raise questions, issues, or concerns, and to make
1619 requests about Personal Information under applicable privacy laws and regulations.

1620
1621 6.5.3 The Online Observation Provider shall provide the Test Taker with the opportunity to
1622 become familiar with the Online Observation process.

- 1623 ➤ Because Online Observation, or specific functioning of a particular product, may be new to
1624 some Test Takers, it is helpful to provide opportunities for the Test Taker to become familiar
1625 with the process prior to the Test Session.
1626 ➤ Ideally, the Test Taker should have the ability to check the hardware and software
1627 requirements prior to registering for the Test or prior to a Test Session. In addition, an online
1628 tutorial, instructions, or simulated practice test may be offered to assist the Test Taker in
1629 becoming familiar with the Online Observation process.
1630 ➤ Where Test Taker accommodations include use of assistive technology, the Test Taker ideally
1631 should be allowed to assess the assistive technology, such as closed captioning or screen
1632 reader tools, to ensure it works with the Online Observation system. Note, however, that
1633 compatibility with the Online Observation system does not ensure compatibility with the Test
1634 driver or Test content.

1635
1636 6.5.4 The Online Observation Provider shall develop, implement, and maintain written policies
1637 and procedures to ensure that any individuals interacting with the Online Observation
1638 Provider’s system or platform are aware when the Online Observation Provider is
1639 launching and shutting down the Online Observation system or platform.

- 1640 ➤ In addition to written notices, the Online Observation Provider may want to develop scripts
1641 for Proctors and acknowledgement steps to share with Test Takers when they are logging in,
1642 accessing the platform, and launching the Test.

1644 6.6 Administration and Post-Administration Activities

1645 For the administration of the Test Session, either the Online Observation Provider or another
1646 entity may provide the Proctor. We have addressed both possibilities in this section. Proctor
1647 training and equipment requirements are further discussed in Section C.

1648 6.6.1 The Online Observation Provider shall ensure processes are in place to promptly notify
1649 the Test Sponsor in the event of a significant incident, as defined by the Test Sponsor’s
1650 incident response plan.

- 1651 ➤ The Online Observation Provider should seek to assist the Test Sponsor in identifying and
1652 defining what is considered a significant incident, and the appropriate responses to take
1653 during the Test Session. A significant incident may include events such as failure of the Online
1654 Observation system, driver performance issues, or a data breach.
- 1655 ➤ Particularly in the case in which the system is down or Proctors are unavailable for a Test
1656 Session, the Test Sponsor, Online Observation Provider, and any other vendors involved in
1657 the Test Session, should have an agreed upon action plan. This may include proactive
1658 outreach to Test Takers and offers to reschedule the Test Session at no additional charge.
1659

1660 6.6.2 The Online Observation Provider shall provide the Proctor with the capability to interact
1661 with the Test Taker in real time to administer the Test, including the capability to provide
1662 any instructions and to bring out-of-compliance testing environments into compliance.

- 1663 ➤ The Online Observation Provider may wish to assist the Test Sponsor in identifying and
1664 defining what is considered an “out-of-compliance” environment, and the appropriate
1665 responses to take during the Test Session. Some Test Sponsors may decide to not launch the
1666 Test if the environment cannot be brought into compliance, while others may wish the Online
1667 Proctor to note the Irregularity but continue to launch the Test. The Online Observation
1668 Provider or the entity providing the Proctors should consider providing scripts and
1669 troubleshooting protocols to Proctors. This can help ensure consistency when interacting
1670 with Test Takers.
1671

1672 6.6.3 Before the start of the Test Session, the Online Observation Provider shall make its Terms
1673 of Service publicly available to Test Takers.

- 1674 ➤ The Online Observation Provider can make these terms available on its primary website, in
1675 the form of a scrollable End User License Agreement, or by incorporating this information
1676 into the testing process and having a click-through agreement prior to the Test that a Test
1677 Taker must accept before continuing to the Test.
1678

1679 6.6.4 Prior to launching the Test, the entity providing the Proctor shall instruct the Proctor to
1680 implement the Test Taker authentication requirements provided by the Test Sponsor.

- 1681 ➤ At this point in the process, the Online Observation Provider or its technology ideally should
1682 notify the Test Taker that Online Observation has started.
- 1683 ➤ As noted above, the Test Sponsor and the entity providing the Proctors should agree upon
1684 any required Test Taker authentication methods. The parties should also agree upon the
1685 protocols to be followed if a Test Taker cannot be authenticated by the Proctor, as those will
1686 vary. Some Test Sponsors may prefer to continue to the Test and require that the Proctor file
1687 an Irregularity Report; others may prefer to not launch the Test and to instruct the Test Taker
1688 to reschedule the Test Session.
1689

1690 6.6.5 Prior to the launch of the test, the Online Observation Provider shall require the Test
1691 Taker to ensure any equipment necessary for the Test Session is compatible with the
1692 Online Observation Provider’s technology and in working order.

1693 ➤ The Online Observation Provider may wish to have an automated system compatibility check
1694 that determines whether the Test Taker’s bandwidth and other equipment, such as the
1695 microphone and camera, are acceptable and working for the Test Session. In addition, the
1696 Online Observation Provider may conduct a scan for additional monitors or virtual machines
1697 at this time.

1698 ➤ If the Online Observation event requires installation of monitoring or other software on the
1699 Test Taker’s device, the monitoring software should only be active during the Test and should
1700 not collect data at other times. The software should be capable of being uninstalled after the
1701 Test.

1702 ➤ If the Test Taker’s equipment is not compatible with the Online Observation Provider’s
1703 technology and cannot be addressed through trouble shooting protocols, the Proctor should
1704 be provided an outline for assisting the Test Taker with what to do next. For example, the
1705 Proctor might suggest that the Test Taker switch computers or reschedule the Test.
1706

1707 6.6.6 The Online Observation Provider shall provide information to Test Takers concerning the
1708 tools available for communication between the Proctor and the Test Taker.

1709 ➤ The Online Observation Provider may want to make this information visible on the Test
1710 Taker’s computer screen during the Test Session. In addition, a Proctor could provide the
1711 Test Taker with an overview of how to contact the Proctor during the Test, such as by live
1712 chat or telephone. The entity providing the Proctor should develop scripts for Proctors to
1713 follow when communicating with the Test Taker regarding available communication tools.
1714 There may be instances where differing language skills or accents make it difficult for a
1715 Proctor and Test Taker to understand one another. If that is the case, text chat can be a useful
1716 tool in promoting understanding.
1717

1718 6.6.7 The Online Observation Provider shall provide information to the Test Taker concerning
1719 the process for technical or first level support.

1720 ➤ The Online Observation Provider should provide this information on its website and on the
1721 Test Taker screen while the Online Observation Provider software is running. In addition, the
1722 entity providing the Proctors can develop scripts to be used by the Proctor to follow when
1723 interacting with the Test Taker. Technical or first level support personnel should also be
1724 provided scripts and common issue resolution protocols to help address Test Taker issues
1725 promptly and consistently.
1726

1727 6.6.8 The Online Observation Provider or the Proctor shall inform the Test Taker of the specific
1728 environmental requirements for the Online Test.

1729 ➤ The entity providing the Proctor should provide defined scripts for the Proctor to follow when
1730 describing the environmental requirements to the Test Taker. This may include, as an
1731 example, the need to ensure that unauthorized individuals do not enter the testing
1732 environment.
1733

1734 6.6.9 The Proctor shall review the Test Taker’s physical and digital testing environment before
1735 and during the Test to identify compliance with Test Sponsor requirements.

- 1736 ➤ If at any time during the Test the physical or digital environment goes out-of-compliance, the
1737 Proctor may be asked to intervene and instruct the Test Taker to bring the environment back
1738 into compliance. For example, if a Test Taker attempts to access a book but such use is not
1739 authorized by the Test Sponsor, the Test Sponsor may instruct the Proctor to intervene and
1740 require that the book be stored away from the Test Taker’s desk.
- 1741 ➤ If intervention is required by the Test Sponsor, the entity providing the Proctor should provide
1742 the Proctor with protocols for intervening if a Test Taker’s physical or digital testing
1743 environment is out-of-compliance and suggested corrective actions the Test Taker may take
1744 to bring the environment back into compliance. If corrective action is not possible, the Proctor
1745 should know whether the Test Sponsor wants the Test Session to continue or to be
1746 terminated. The Proctor should document any Irregularity and the corrective actions
1747 attempted or taken.
- 1748 ➤ If prior to or during the Test Session it is necessary for the Test Taker to use different
1749 equipment, the Online Observation Provider should conduct an additional equipment check
1750 on the new device(s) prior to launching or re-launching the Test Taker’s access to the Test.
1751

1752 6.6.10 Once the Test is launched, the Proctor shall observe the Test Taker and the environment
1753 and report on any potential Irregularities.

- 1754 ➤ The Proctor should be active and engaged in monitoring the Test Taker. The Proctor should
1755 record any Irregularities by flagging or otherwise noting concerns in a report to the Test
1756 Sponsor. Examples of rules commonly required by a Test Sponsor may include:
 - 1757 • Test Taker must clear workspace and the surrounding area prior to launch of the Test;
 - 1758 • Test Taker may not use dual monitors;
 - 1759 • Test Taker must be connected to a power source;
 - 1760 • Test Taker may not have access to phones;
 - 1761 • Test Taker may not wear ear plugs or headphones;
 - 1762 • Test Taker must be alone in the room;
 - 1763 • Test Taker is not permitted to talk or read aloud after the Test Session begins;
 - 1764 • Test Taker’s webcam, speakers, and microphone must remain on throughout the Test;
1765 and
 - 1766 • Test Taker must stay in view of the webcam for the duration of the Test.
- 1767 ➤ The Test Sponsor may request regional differences in instructions to address localization
1768 needs.
1769

1770 6.6.11 The Proctor shall follow the Test Sponsor’s requirements concerning intervening in a Test
1771 Session in the event of a potential or confirmed Irregularity.

- 1772 ➤ At a minimum, any suspected Irregularity should be monitored and noted in a report to the
1773 Test Sponsor. The Proctor should follow the Test Sponsor’s protocols for intervening, if
1774 required.
1775

1776 6.6.12 At the end of the Online Observation session, the Online Observation Provider shall:

- 1777 a) Remove, or provide instructions to remove, any temporary authorized files on the local
1778 systems used by the Proctor for the purposes of Online Observation;
1779 b) Provide secure and timely reports of Test Session data to the Test Sponsor;
1780 c) Make additional information regarding any Irregularity available to a Test Sponsor upon
1781 request; and
1782 d) Retain Online Observation Test Session data in accordance with Test Sponsor agreements.
- 1783 ➤ The Proctor or system should check that the Test Session is closed for security purposes and,
1784 if that has not occurred, report it as an Irregularity. Note, however, that the ability to conduct
1785 this check is dependent on the technical integration between the driver provided by the
1786 Technology-Based Test Delivery Provider and the Online Observation system and thus may
1787 not be available in all instances.
- 1788 ➤ The system should indicate to the Test Taker that visual and audio recording has stopped.
1789 Ideally, the system should automatically remove any temporary authorized files on the local
1790 systems used by the Test Taker during the Test Session.
- 1791 ➤ The Online Observation Provider should periodically report data to Test Sponsors. Common
1792 data provided to Test Sponsors include Tests completed, materials removed, the number or
1793 percentage of active interventions, and suspected or confirmed incidents of rule violations.
- 1794 ➤ The Online Observation Provider should periodically conduct reviews of incidents to
1795 determine whether other activities can be taken to mitigate against future events. To the
1796 extent incidents are related to Online Proctor activities, this may include additional training
1797 of staff and performance reviews.
- 1798
- 1799

1800 **B. Online Observation of Tests without a Proctor**

1801 **7 Test Sponsor Requirements and Best Practices for the Online Observation of** 1802 **Tests without a Proctor**

1803 Technology can be used to preserve a record of a Test Session for human review after the Test
1804 Session has concluded. This can take several different forms, including:

- 1805 • Using a camera and microphone to observe and record the video and audio from a Test
1806 Session and making that recording available for later human review;
- 1807 • Using a camera and microphone to observe and record the Test Session along with using
1808 artificial intelligence to report potential Irregularities, where both the record and report
1809 of Irregularities can be made available for later human review;
- 1810 • Using a Launcher to authenticate the Test Taker and then, after authentication and the
1811 start of the Test, the Launcher will leave the Test Session and technology will be used to
1812 observe and record the remainder of the Test Session;
- 1813 • Using a Launcher to authenticate the Test Taker and ensure the physical environment
1814 meets Test Sponsor requirements; once those activities are complete the Launcher will
1815 start the Test and leave the Test Session. The remainder of the Test Session may or may
1816 not be observed or recorded.

1817
1818 This type of Online Observation creates different vulnerabilities in the Test administration
1819 process compared to either in-person proctoring or Online Observation of Tests with a Proctor.
1820 To adequately incorporate it into a testing program, Test Sponsors should holistically consider a
1821 variety of aspects concerning the Test, including test design and length, breaks, administration
1822 rules, and evidence available for investigation. In addition, if a Test Sponsor offers both in-person
1823 and online delivery when implementing the Online Observation of Tests, the Test Sponsor should
1824 regularly evaluate its data to ensure there is an equivalent and fair test taker experience across
1825 all delivery methods.

1826
1827 The records from any of these types of Online Observation events may be subject to random or
1828 routine auditing after the Test Session concludes. Individuals auditing the Test Session may be
1829 provided by the Online Observation Provider, the Test Sponsor, or an authorized third party.

1830
1831 The following clauses set forth Test Sponsor responsibilities related to the Online Observation of
1832 Tests without a Proctor, with specific focus on Test administration and post-administration. The
1833 term “Online Observation” may be used interchangeably with “Online Observation of Tests
1834 without a Proctor” throughout Section B of these standards.

1835

1836 **7.1 Test Sponsor Policies and Procedures**

1837 **7.1.1** The Test Sponsor shall develop, implement, and maintain written policies that promote a
1838 standardized, secure, and fair Test experience commensurate with the purpose of the Test.

- 1839 ➤ Test Sponsor policies will vary depending on the assessment purpose and the demographics
1840 of the testing population. When considering policies for the Online Observation of Tests
1841 without a Proctor, policies typically address Test security, such as the requirements for Test
1842 Taker authentication, Test environment requirements, what aids a Test Taker is allowed to
1843 use during the Test, and how Irregularities will be documented, reviewed, and resolved.
- 1844 ➤ The Test Sponsor should include policies that address requirements for the Test Auditor, such
1845 as requiring an agreement to keep Test content and other information regarding the Test
1846 Session confidential and the desired level of training for Test Auditors. In addition, policies
1847 often address when and how a Test Sponsor may audit any Test Session record as well as how
1848 a Test Taker may challenge a Test score or other decision.
- 1849 ➤ Test Sponsor policies should also specifically address disability and other accommodations or
1850 exemptions available for Tests delivered using Online Observation. The Test Sponsor should
1851 document the process and timeline for requesting disability-related accommodations in
1852 locations where the Test Taker can easily access the information prior to enrolling in the Test.
1853 The Test Sponsor should ensure that the information is available in an accessible format, such
1854 as following the W3C guidelines (www.w3.org) if the information is posted on a website.
1855 Policies related to special accommodations should be integrated into training documents and
1856 Test Session scripts.
- 1857 ➤ Where feasible, it also good practice to respect religious or cultural practices of Test Takers.
1858 For example, the Test Sponsor may permit a Test Taker to wear head scarves or other head
1859 coverings during the Test Session if head coverings are required by the Test Takers' religion.
- 1860 ➤ Test Sponsors should communicate relevant policies, and any exceptions, to the Online
1861 Observation Provider. To gauge compliance with Test Sponsor policies, it is recommended
1862 that Test Sponsors regularly undergo an internal policy and procedures review as it applies to
1863 the Online Observation of Tests without a Proctor. Each organization should define the
1864 timeframe for regularly undertaking a review and the policy and process for such review. If
1865 AI or biometrics are being used, the AI or biometric algorithmics, evidence to support
1866 application across demographic groups, and related policies may need to be reviewed more
1867 frequently.

1869 7.1.2 The Test Sponsor shall develop, implement, and maintain written policies regarding the
1870 use of testing aids during a Test Session.

- 1871 ➤ Testing aids include external calculators, erasable white boards, scratch paper, text books and
1872 other materials as well as integrated calculators, highlighters, and magnifying tools approved
1873 by the Test Sponsor. Before approving use of such aids, Test Sponsors should be mindful of
1874 the limited ability to inspect and observe testing aids at all times during the Test Session.

1876 7.1.3 The Test Sponsor shall develop, implement, and maintain written policies to protect the
1877 integrity of the testing process and testing assets before, during, and after the administration of
1878 a Test.

- 1879 ➤ Common policies for protecting the integrity of the testing process may include rules
1880 prohibiting scratch paper, pens, food, or smoking materials in the testing space.

1881

1882 7.1.4 The Test Sponsor shall develop, implement, and maintain written policies that control the
1883 physical testing environment to minimize test security threats during a Test.

- 1884 ➤ One of the advantages of delivering a Test using Online Observation is the flexibility to
1885 provide Test Takers an option to test outside of a test center while still providing appropriate
1886 Test security. Examples of Test environment requirements may include requirements that
1887 the Test Taker be alone in the room, that the testing area be free of unauthorized materials,
1888 descriptions of the types of suitable testing locations (such as at home or in a library), and the
1889 types of unsuitable testing locations (such as a coffee house or inside a vehicle). Test
1890 Sponsors should balance the need to provide access to the Test with the need to administer
1891 the Test in a secure environment. For example, it may be appropriate to provide some
1892 flexibility for Test Takers who are minors, or for Test Takers who are testing in a home
1893 environment where disruptions by a family member or pet may occur during the
1894 administration of the Test.
- 1895 ➤ Where there is no Proctor evaluating the environment prior to the launch of the Test, Test
1896 Sponsors should be aware that they may be ceding the ability to enforce their Test
1897 environment requirements until after the Test Session is completed. In those circumstances,
1898 there may be security issues that are not caught or addressed until after the fact. To address
1899 that vulnerability, some Test Sponsors choose to use an individual to check-in the Test Taker
1900 prior to launch of the Test. The Test Taker may be required to conduct a room scan and
1901 remove unauthorized materials from the Test environment prior to the launch of the Test.
- 1902 ➤ AI may be used to identify out-of-compliance Test environments and prohibit a Test Taker
1903 from launching a Test until the environment is brought into compliance. Note, however, that
1904 in addition to requiring significant sophistication from the AI, there are also legal and
1905 regulatory requirements around the globe that may require a human to review an AI
1906 “decision” that determines not to launch a Test based on an AI indicator.

1908 7.1.5 The Test Sponsor shall develop, implement, and maintain written policies to manage the
1909 digital testing environment and to control for Test security threats during the Online Observation
1910 of Tests.

- 1911 ➤ Examples of digital testing environment requirements may include compatible camera
1912 technology, microphone, software, or installation of proprietary web browsers, browser
1913 extensions, or plug-ins. The Test Sponsor should provide public facing information regarding
1914 any requirements for the digital testing environment in a manner that can be easily accessed
1915 by Test Takers. The more a Test Taker can do in advance to prepare the digital testing
1916 environment appropriately, the less likely an incident will arise during the launch or
1917 administration of the Test Session that could pose a threat to Test security or to the smooth
1918 administration of the Test.

1920 7.1.6 The Test Sponsor shall develop, implement, and maintain written policies regarding the
1921 requirements to authenticate the Test Taker before and during the Test.

- 1922 ➤ The requirements for Test Taker authentication should be commensurate with the risks
1923 associated with any particular Test. For example, a lower stakes Test may allow Test Taker
1924 self-identification or display of a school identification card that includes a photo, while a
1925 higher stakes Test may require the Test Taker to use government-issued identification card

1926 or even use of biometrics. To ensure Test Takers are prepared to present any required
1927 identification information and to respect the privacy rights of Test Takers, Test Sponsors
1928 should provide public facing information regarding Test Taker identification requirements,
1929 including the data collected, its purpose, and where it is stored.

- 1930 ➤ Test Sponsor policies related to Test Taker authentication should be integrated into Online
1931 Observation Provider training documents and Test Session scripts for Launchers and Auditors.
- 1932 ➤ Biometric Data may be used during the Test Taker authentication process. If the Test Taker is
1933 authenticated using an automated process incorporating Biometric Data, the Test Sponsor
1934 should require human reviewers to verify rejections received from the automated process.
- 1935 ➤ From a user experience, it may be preferable to allow the Test Taker to leverage the
1936 Technology-Based Test Delivery Provider’s login/SSO/IMS standard to avoid requiring the
1937 Test Taker to maintain separate registration and login information from the Technology-
1938 Based Test Delivery Provider’s platform. Test Sponsors should seek to ensure that the
1939 security for accessing the platform is sufficient for the stakes of the Test.

1941 7.1.7 The Test Sponsor shall develop, implement, and maintain written policies regarding
1942 authorized and unauthorized Test Taker breaks during an Online Test.

- 1943 ➤ The Test Sponsor should publish policies on how authorized and unauthorized breaks will be
1944 managed. While many programs allow for scheduled breaks, there may be unscheduled
1945 breaks that are still permitted by the Test Sponsor. For example, a nursing mother may need
1946 an unscheduled break to breastfeed or express breast milk. The Test Sponsor should decide
1947 in advance how it wants to manage a variety of unscheduled break needs and communicate
1948 its acceptable options to the Online Test Provider. The Test Sponsor’s policies should be clear
1949 on the circumstances in which break times will count against total allotted Test time and
1950 whether or not a Test Taker is allowed to revisit Test questions after returning from a break.
1951 Policies should also be clear on whether the Test Taker will need to display identification, via
1952 camera or some other means, upon return from break.

1953 g

1954 7.1.8 The Test Sponsor shall develop, implement, and maintain a written plan that specifically
1955 addresses the risks and Irregularities that may arise when using the Online Observation of Tests
1956 without a Proctor.

- 1957 ➤ As with any Test delivery method, the Test Sponsor should have in place a written plan that
1958 addresses key risks and Irregularities associated with a Test. There are risks and Irregularities
1959 that are unique to the Online Observation of Tests that should be addressed, such as
1960 interruptions from children, dogs barking, doorbells ringing, and technology disruptions. The
1961 Test Sponsor should take into account that a Proctor will not be online during these events
1962 and thus, the ability to remediate may be limited, at least during the time of the Test Session.
1963 Thus, the Test Sponsor’s written response plan should clearly address how these incidents
1964 will be handled by the Test Sponsor after the Test Session.
- 1965 ➤ The written plan should include the investigation process and evidence to be collected and
1966 reviewed. For example, in the event of a rule violation, the Test video, indicators of possible
1967 Irregularities, and Test Auditor notes should be reviewed prior to making an outcome
1968 determination.

- 1969 ➤ Depending on the level of the incident or Irregularities, the written plan should also include
1970 expected notice and response times in line with level of urgency and threat to Test integrity
1971 or Test Taker privacy. In addition, for higher level matters, the Test Sponsor and Online
1972 Observation Provider should have personnel identified to respond to incidents or
1973 Irregularities.
1974 ➤ Test Sponsors should regularly review and update their written plans to ensure they are
1975 current.

1976
1977 7.1.9 The Test Sponsor shall develop, implement, and maintain written policies and procedures
1978 for responding to out-of-compliance physical or digital environments, out-of-compliance
1979 identification, and unauthorized Test Taker behavior during an Online Test.

- 1980 ➤ The Test Sponsor should bear in mind that many of these incidents or Irregularities will need
1981 to be addressed after the Test Session.

1982
1983 7.1.10 The Test Sponsor shall develop, implement, and maintain written processes for
1984 addressing the use of algorithmic decision-making, such as the use of AI during the Online
1985 Observation of Tests without a Proctor. When a negative outcome is recommended by AI during
1986 the Online Observation process, the Test Sponsor or its agent shall engage in human review of
1987 any negative outcome recommended, at a minimum.

- 1988 ➤ The Test Sponsor should use a human to review and validate the Online Observation
1989 Provider's data suggesting that an Irregularity may have occurred.

1990

1991 **7.2 Test Sponsor Privacy Policies and Best Practices Related to Online Observation**

1992 7.2.1 The Test Sponsor shall develop, implement, and maintain written policies and procedures
1993 to protect Personal Information, including Sensitive Personal Information, captured during the
1994 Online Observation process.

- 1995 ➤ The Test Sponsors should develop written policies related to securing facilities and systems
1996 (such as software, platforms, applications), training personnel, data privacy and protection,
1997 data retention, and data destruction.
1998 ➤ Because the laws and regulations protecting Test Taker information can vary by country and
1999 state, best practice is to treat all Personal Information with care and be familiar with
2000 applicable laws and statutes. The Test Sponsors should identify any data protection standards
2001 to which it adheres.
2002 ➤ The Test Sponsor should review its privacy policies and procedures on a regular basis to
2003 ensure they are current, clearly written, transparent, and compliant with applicable privacy
2004 laws and regulations.
2005 ➤ The Test Sponsor should also ensure that the Online Observation Provider has similar
2006 documentation available concerning the protection of Personal Information.

2007
2008 7.2.2 The Test Sponsor shall Process only the minimum amount of Personal Information needed
2009 for the functioning, integrity, or security of the Test and the administration of the Test.

2010 ➤ The Test Sponsor should conduct an assessment of the data it collects and identify the
2011 purpose and use for the data collected.⁶ The Test Sponsor should collaborate with the Online
2012 Observation Provider to identify the type of data needed to observe the Test, report
2013 Irregularities, and provide score reports. If the Test Sponsor determines it wants to Process
2014 Personal Information for research, it should establish procedures by which it anonymizes that
2015 data so that Test Takers' Personal Information is not unnecessarily retained for such
2016 purpose(s).

2017
2018 7.2.3 The Test Sponsor shall document the types of Test Taker Personal Information Processed
2019 during the testing process and conduct an inventory of that data, including where it is located
2020 and in what systems or databases it is processed or stored.

2021 ➤ The Test Sponsor should identify the location of Personal Information, where it is hosted,
2022 with whom it is shared, and whether data is transferred across borders.

2023 ➤ The Test Sponsor should contractually require that any third parties used in the testing
2024 process, including the Online Observation Provider, accept substantially similar requirements
2025 covering their work on behalf of the Controller. Further, the Processor must require the same
2026 obligations of any Sub-Processor(s), including where data storage location, and data transfer
2027 should be made available in a transparent manner to the Test Sponsor.

2028
2029 7.2.4 The Test Sponsor shall identify any Personal Information that is considered "sensitive"
2030 under the laws or regulations of jurisdictions in which its Tests are delivered and adopt
2031 appropriate procedures for Processing that data.

2032 ➤ In some jurisdictions, certain data such as children's data, biometric data, health data, or data
2033 that indicates the race or ethnicity of the Test Taker needs special protection or imposes
2034 additional requirements on the Controller if it is collected, which may affect how the
2035 Processor handles its Processing. The Test Sponsor should identify such Sensitive Personal
2036 Information and ensure it is appropriately protected during Processing.

2037
2038 7.2.5 The Test Sponsor shall identify the purpose(s) for which Test Taker Personal Information
2039 is Processed during Testing and clearly provide that information to Test Takers in a transparent
2040 manner.

2041 ➤ Examples of purpose include collecting Personal Information for the purpose of Test Taker
2042 authentication or to report scores following the conclusion of the Test.

2043
2044 7.2.6 The Test Sponsor shall limit its use of Personal Information to the stated purpose(s) and
2045 shall ensure the Online Observation Provider and any Sub-Processor also limit use of Personal
2046 Information to the stated purpose(s).

⁶ Given evolving privacy laws and regulations, a Test Sponsor should evaluate its need for specific Personal Information. The principle of Data Minimization and Purpose Limitation should guide the Test Sponsor in this evaluation to limit the amount of personal information collected, processed, and stored, thereby limiting the organization's risk exposure and legal liability.

2047 ➤ If the Test Sponsor uses Test Taker Personal Information for other purposes, those new
2048 purposes must be disclosed to the Test Taker in a separate notice and meet any jurisdictional
2049 legal approvals and requirements.

2050
2051 7.2.7 The Test Sponsor shall have a written agreement with any Processor that specifically
2052 identifies the services the Processor is to provide, including its responsibilities regarding Personal
2053 Information, information security, and any cross-border data transfers.

2054
2055 7.2.8 The Test Sponsor shall document in writing how long different types of Personal
2056 Information are retained. After the retention period, or in the event the Test Sponsor stops using
2057 a Processor, the Test Sponsor or its agents shall promptly and irrevocably destroy the data or
2058 engage in Data Anonymization.

2059 ➤ The Test Sponsor should establish a time period for each type of Personal Information that is
2060 the minimum time necessary to hold such data. Some types of data, such as copies of
2061 government-issued identity documents, may be retained for less time than other less
2062 sensitive data.

2063 ➤ Technical measures should be used to ensure the data destruction or Data Anonymization is
2064 irrevocable.

2065
2066 7.2.9 The Test Sponsor, as the Data Controller, shall publish a publicly accessible privacy policy,
2067 which shall include processes for how Test Takers can exercise their rights related to their
2068 Personal Information.

2069 ➤ This information should shall include how Test Takers can access or receive a copy of their
2070 Personal Information and processes for how Test Takers can request revisions or deletion of
2071 their Personal Information and any circumstances under which such requests may be denied.

2072 ➤ Test Sponsors may deny requests for revision or deletion for legitimate reasons. For example,
2073 a Test Sponsor may deny a Test Taker's request to delete Personal information, such as a Test
2074 Taker's video, if the information needs to be retained for a legitimate test security reason
2075 (such as an investigation of proxy testing).

2076 ➤ Test Takers' rights are determined by applicable laws and regulations.

2077
2078 7.2.10 The Test Sponsor shall have written policies and procedures related to Test administration
2079 that require technological and organizational security measures to be in place to protect Personal
2080 Information from destruction, loss, alteration, unauthorized disclosure, unauthorized access, and
2081 unauthorized Processing, including:

2082 a) Requiring Test Taker's Personal Information to be encrypted at rest and encrypted or
2083 otherwise securely protected in transit;

2084 b) Limiting access to Personal Information to only those individuals whose duties require
2085 such access; and

2086 c) Requiring that Personal Information collected during the Test Session be returned,
2087 destroyed, or Anonymized after the retention period or at the termination of any vendor
2088 agreement.

2089 ➤ Test Sponsors should be familiar with and follow technical practices for ensuring the
2090 confidentiality, integrity, and availability of Personal Information. For example, the Test

2091 Sponsor should restrict access to Personal Information to only authorized individuals,
2092 following the principle of least privilege when it pertains to user access. The Test Sponsor
2093 should maintain policies regarding role-based access and permitted activities, such as “read
2094 only,” and be familiar with applicable information security standards.

2095 ➤ Test Sponsors should follow the principles of Privacy by Design and Privacy by Default in their
2096 process and system design. Privacy by Design and Default is an approach to systems
2097 development that requires data protection be taken into account throughout the
2098 development process. These terms may have specific meanings in different jurisdictions. For
2099 example, in some jurisdictions these concepts include not only the development of systems
2100 but also Processing activities.

2101 ➤ The Test Sponsor should conduct regular internal security reviews to ensure the appropriate
2102 protection of Personal Information.

2103
2104 7.2.11 The Test Sponsor shall provide annual training in data privacy and information security to
2105 its personnel with authorized access to Test Taker Personal Information. The Test Sponsor shall
2106 maintain evidence of, and records of, the training.

2107 ➤ The Test Sponsor should provide training in accordance with applicable regulations, such as
2108 the Family Educational Rights and Privacy Act (“FERPA”) in the United States, the Personal
2109 Information Privacy Law (“PIPL”) in China, or the General Data Protection Regulation
2110 (“GDPR”) in the European Union. Training should include requirements for categorizing,
2111 accessing and protecting sensitive data and personal information, as well as training
2112 concerning the legal requirements of confidentiality and the importance of maintaining chain
2113 of custody documents.

2114 ➤ Employee acknowledgments for protecting Personal Information should be a component of
2115 annual privacy training. The Test Sponsor should periodically assess personnel to check their
2116 understanding of such training.

2117
2118 **7.3 Biometrics and Artificial Intelligence.**

2119 Biometric technology can be used to improve upon the accuracy of human verification of identity.
2120 For example, an identity can be established from a biometric capture against an identity
2121 document, and then used to assure that a Test Taker remains the same individual throughout the
2122 testing process. This identification could occur using facial recognition, fingerprints, iris scans, or
2123 other physical characteristics that, when independent or pieced together, can be used to identify
2124 an individual against a claimed identity.

2125
2126 Laws regulating the governing the Processing of Biometric Data vary across regions, and new laws
2127 and regulations continue to be enacted. A Test Sponsor should consider in what jurisdiction it is
2128 operating to fully appreciate the rights and obligations of the parties involved in collecting and
2129 Processing Biometric Data. For example, under GDPR Biometric Data are considered sensitive or
2130 specially protected data and requires heightened protection, including express consent by the
2131 individual with the right to withdraw consent at any time. In some jurisdictions, where a
2132 photograph is used to confirm Test Taker identification, the photograph may be considered
2133 Biometric Data. Given the sensitivity and strict treatment of Biometric Data in the EU, Test

2134 Sponsors delivering tests in Europe may wish to provide other options, disable use of Biometric
2135 Data, or otherwise ensure that Test Takers can choose not to provide Biometric Data without
2136 adverse consequences.

2137

2138 AI systems and processes rely upon algorithms that can predict patterns in data. AI systems can
2139 be used in multiple ways during the Online Observation of Tests, including identifying aberrant
2140 Test Taker or Proctor behaviors based on video or audio data, or determining if other
2141 Irregularities occur in the testing process or environment that can be identified for human review.

2142

2143 While AI systems and processes can help augment human observations, AI can result in and
2144 perpetuate bias. Three categories of bias have been identified: algorithmic prejudice (which
2145 arises when there are correlations between protected features and other factors); negative
2146 legacy bias (which stems from bias in the training data); and underestimation (which occurs when
2147 the data used to train the system is imbalanced, resulting in bias against a defined class). Because
2148 of the potential for bias and discrimination when implementing AI, use of AI in testing has come
2149 under additional scrutiny from the public and from regulators. Laws regulating the use of AI are
2150 continuing to evolve and expand around the world. To remain up to date, Test Sponsors should
2151 regularly reference the laws and regulations in the localities in which their Test Takers are located
2152 and where their Tests are administered for guidance on use of AI.

2153

2154 7.3.1 If Biometric Data are captured during the Test administration process, the Test Sponsor
2155 shall ensure the Biometric Data are used for only the stated purpose and any related
2156 security measures and retention periods for Biometric Data are followed.

2157 ➤ Test Sponsors should regularly monitor the use of any Biometric Data and remediate if bias
2158 or discrimination is found or likely to occur.

2159 ➤ Test Sponsors should request the Online Observation Provider to submit bias or
2160 discrimination evidence regarding the use of Biometric Data and require the Online
2161 Observation Provider to monitor the tool on an ongoing basis to ensure any bias or
2162 discrimination remains limited and mitigated.

2163

2164 7.3.2 The Test Sponsor shall provide written notice to Test Takers regarding the Processing of
2165 Biometric Data during the Test administration process, how the Biometric Data will be
2166 used, and the retention period for the Biometric Data.

2167

2168 ➤ Notice provided by the Test Sponsor should clearly describe the purpose of Processing
2169 Biometric Data. For example, Biometric Data may be used for Test Taker authentication or
2170 security of the Test and Test Session. Notice may also include explanations of how reference
2171 information was obtained, how the sample/claim information was obtained, the basic chain
2172 of Biometric Data Processing (detection, qualification, template generation, matching,
2173 decision), cooperative use expectations, and fall-back processes.

2174 ➤ In addition, in many jurisdictions, Test Sponsors must also obtain express written consent
2175 from Test Takers before Processing Biometric Data and allow the Test Taker to withdraw their

2176 consent at any time unless there is another legal ground for Processing Biometric Data such
2177 as applicable that allows its continued use.

2178
2179 7.3.3 If Artificial Intelligence is used during the Test administration process to identify an
2180 Irregularity, the Test Sponsor shall require evidence that the Artificial Intelligence has
2181 been trained and tested to mitigate the potential for bias or discrimination.

2182 ➤ It is important for Test Sponsors to evaluate and monitor the AI tools utilized in Online
2183 Observation and limit or mitigate any bias. Monitoring should occur on an on-going basis, as
2184 bias could be introduced over time based on the data experienced by the algorithm. As noted
2185 in the introduction, bias evidence may describe the documentation of metadata measured
2186 and indicating how bias was assessed, the measures of inequity in training or testing data,
2187 the methods used to mitigate data inequity (architectural or training), measures taken to
2188 mitigate group bias, especially in the data labelling phase, and any measures of inequity in
2189 system performance.

2190
2191 7.3.4 The Test Sponsor shall provide notice to Test Takers regarding the use of AI or automated
2192 decision-making employed during the Test administration process.

2193 ➤ Test Sponsors shall disclose any use of AI or automated decision-making that has the potential
2194 for a serious impact on the individual as well as how Test Takers can appeal a negative
2195 decision to a human reviewer. This requirement does not require a Test Sponsor to disclose
2196 its Intellectual Property or Intellectual Property rights or provide such details that a Test Taker
2197 can work around security but should include a high-level explanation of the use of automated
2198 decision-making or AI employed during the Test administration process to inform Test Takers
2199 about how such technology is used.

2200
2201 7.3.5 If AI or automated decision-making tools are used during the Test administration process
2202 to identify suspected Irregularities, the Test Sponsor shall develop processes that enable
2203 human review of any decisions made as a result of using AI or automated decision-making
2204 tools during the Online Observation process.

2205 ➤ Test Sponsors are required to disclose any automated decision, whether or not rendered by
2206 AI, that has the potential for serious impact on an individual and the process for appealing
2207 that decision to a human reviewer. The Test Sponsor should enable human review or audit of
2208 any data associated with an Irregularity indicator generated by AI, whether initially or through
2209 challenge escalation to human review. While a Test Sponsor can delegate the responsibility
2210 to review data generated by AI to the Online Observation Provider, final adjudication of a
2211 decision must remain with the Test Sponsor.

2212
2213 **7.4 Pre-Contracting and Contracting Considerations with the Online Observation Provider**

2214 The business and contracting structure for delivering a Test using Online Observation may vary.
2215 For example, a Test Sponsor may work directly with an Online Observation Provider or may work
2216 with a Technology-Based Test Delivery Provider who also offers Online Observation. This section
2217 is intended to address both scenarios.

- 2218 7.4.1 Prior to entering into an agreement for the Online Observation of Tests without a Proctor,
2219 the Test Sponsor shall conduct due diligence to understand the business structure of the
2220 entity providing the Online Observation services and obtain information about its
2221 technology, operations, policies, and practices.
- 2222 ➤ Pre-contracting due diligence is important to help the parties better understand the others'
2223 needs, align expectations, and come to a clear agreement as to their respective
2224 responsibilities. It is common for both parties to share information during this process. It is
2225 recommended that a mutual non-disclosure agreement be in place prior to sharing
2226 confidential or sensitive business information.
 - 2227 ➤ During the pre-contracting phase, the Test Sponsor should share information with, and obtain
2228 information from, the entity providing the Online Observation services to enable all parties
2229 to align their respective responsibilities and expectations in providing services to Test Takers.
 - 2230 ➤ The Test Sponsor should communicate to the Online Observation Provider its requirements
2231 regarding data privacy, accommodations, testing environment, Test Taker identification, and
2232 security measures.
 - 2233 ➤ To help ensure a positive Test Taker experience, the Test Sponsor should further share
2234 information about the various systems involved in the testing process so the parties can
2235 better understand how those systems will integrate with the Online Observation services. For
2236 example, other systems may include Learning Management Systems, Learning Tools
2237 Interoperability (LTI), Application Programming Interface (API) integrations, or Technology-
2238 Based Test Delivery integrations. Test Sponsors should also ask about how the Online
2239 Observation Provider collects feedback from Test Takers regarding their experience. Test
2240 Sponsors should also ask what information the Test Sponsor will need to provide for each
2241 Test Session and in what format the information will be shared.
 - 2242 ➤ Test Sponsors should be prepared to share additional information with the Online
2243 Observation Provider if requested during this pre-contracting stage. For example, the Test
2244 Sponsor should be prepared to share information concerning its corporate structure and
2245 whether it is currently delivering Tests using Online or In-Person Proctors.
 - 2246 ➤ During due diligence, it is also important for the Test Sponsor to understand the business
2247 structure and financial position of the entity or entities providing the Online Observation
2248 services and Processing any Test Taker data. This will enable the Test Sponsor to better
2249 understand the responsibilities of each party and ensure the correct party or parties are
2250 included in the agreement.
 - 2251 ➤ The Test Sponsor's due diligence should also include the Online Observation Provider's
2252 policies and practices related to Processing Test Taker Personal Information. Such due
2253 diligence may also include a privacy risk assessment by the Test Sponsor, with assistance from
2254 the Online Observation Provider, to assess the impact the Online Observation Provider's
2255 procedures may have on Test Sponsor's ability to meet applicable privacy laws and
2256 regulations. The Test Sponsor should ask the contracting entity to define the geographical
2257 locations in which Test Taker Personal Information is stored or moved across territorial
2258 boundaries by the Online Observation Provider or the Technology-Based Test Delivery
2259 Provider. This will help the Test Sponsor to properly include contractual obligations in the
2260 agreement to protect Test Taker Personal Information and confidential data. Similarly, the

- 2261 Test Sponsor should inquire regarding the contracting entity's ability to securely collect,
2262 process, and store Test Taker Personal Information and other confidential data.
- 2263 ➤ The Test Sponsor should seek to understand from the Online Observation Provider the
2264 specific technical interactions of its methodology, such as use of collaboration technology,
2265 browser plug-ins, browser extensions or client applications (.exe or dmg file types). The Test
2266 Sponsor should also request information regarding protocols, procedures, and tools used
2267 during the Test Session to observe the Test Taker and take actions either before or during
2268 launching the Test to ensure they are consistent with the Test Sponsor's written policies. For
2269 example, the Test Sponsor should inquire whether the Online Observation Provider can use
2270 technology to prevent the Test Taker from gaining access to information outside the testing
2271 environment and if it uses or can offer algorithmic methods to monitor Test Takers and
2272 identify potential Irregularities.
 - 2273 ➤ The Test Sponsor may also desire information concerning about Launcher language
2274 capabilities, communication skills, and training. It should also seek additional information
2275 regarding the requirements for Launcher and Auditor equipment, such as the minimum
2276 screen sizes for Launchers and Auditors, the Launcher to Test Taker ratios available, and the
2277 security measures required for Launcher and Auditor equipment.
 - 2278 ➤ The Test Sponsor should ascertain from the Online Observation Provider the disaster
2279 recovery and business continuity plans and redundancies in place to address emergency
2280 situations that may occur at the Online Observation Provider's main site(s) or in the event of
2281 technological attempts to disrupt service. These plans should also ensure confidentiality, data
2282 security, and data integrity in the event of an emergency. This may include but not be limited
2283 to disruption of a key service or main site(s).

2285 7.4.2 The Test Sponsor shall enter into a written agreement with the provider of Online 2286 Observation services.

- 2287 ➤ As noted above, this agreement may be directly with the Online Observation Provider or with
2288 a Technology-Based Test Delivery Provider who then enters into a separate agreement with
2289 the Online Observation Provider. The agreement(s) should address the business
2290 arrangement between the parties including, among other things, the following topics as they
2291 relate to the Online Observation of Tests:
 - 2292 • Test Session requirements, including but not limited to Test Sponsor specifications
2293 concerning Test Taker authentication, device and environmental requirements, allowed
2294 testing aids, and Test Taker conduct;
 - 2295 • Security and data privacy requirements, including distinguishing between the
2296 responsibilities and liabilities for the Data Controller and Data Processor;
 - 2297 • Test Taker and Launcher or Auditor technology system requirements and technology
2298 protocols to prevent access to unauthorized information;
 - 2299 • Average Test Taker to Launcher ratios;
 - 2300 • Launcher and Auditor training and conduct requirements;
 - 2301 • Support for Test Takers;
 - 2302 • Reporting and performance metrics;
 - 2303 • Launcher and Auditor conflict of interest requirements;

- 2304 • Audit rights, indemnification, and insurance obligations, if any;
- 2305 • Data storage, retention and destruction requirements; and
- 2306 • Business continuity and incident response requirements.
- 2307 ➤ Test Sponsors should communicate with vendors what relationships or situations may
- 2308 constitute a conflict of interest and are required to be reported to the Test Sponsor should
- 2309 they arise.
- 2310 ➤ During the term of the contract, the Test Sponsor and contracting entities should conduct
- 2311 periodic meetings to ensure procedural and technical requirements are being met.
- 2312 ➤ The Test Sponsor may also wish to specify the Online Observation Provider’s requirement to
- 2313 provide software release notes or an accessible change log of software revisions, as well as
- 2314 documented “roll back” processes in the event a new software release is not working as
- 2315 designed.

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2317

2318 7.5 Pre-Test Communications with the Test Taker regarding the Online Observation of Tests 2319 without a Proctor

2320 7.5.1 The Test Sponsor shall provide publicly accessible information concerning the Online
2321 Observation of Tests without a Proctor, including:

- 2322 a) the Test Taker’s rights and responsibilities, including the hardware and software
- 2323 specifications required for the Test Session and the testing environment requirements
- 2324 the Test Taker is responsible for providing;
- 2325 b) testing day rules, testing protocols, and authorized Test Taker behaviors, including
- 2326 Test Taker Authentication requirements, and whether algorithmic methods, such as
- 2327 AI, are used during the Online Observation process;
- 2328 c) accessibility compliance, including how to apply for accommodation requests; and
- 2329 d) the Test Sponsor’s privacy policy.

- 2330 ➤ The Test Sponsor should provide information and guidance to Test Takers in understanding
- 2331 what technical and equipment needs must be met in order to take the Test, such as a
- 2332 functioning computer, camera, microphone, and acceptable internet connection.
- 2333 ➤ The Test Sponsor should offer this information in multiple locations. For example, the Test
- 2334 Sponsor should provide Test Taker technology requirements on its website as well as during
- 2335 the registration process, or publish the Test rules on their website, display them during the
- 2336 registration process, and summarize them prior to the start of the Test Session.
- 2337 ➤ Ideally, Test Takers should be given access to this information and the agreement prior to the
- 2338 Test Session to allow time for review.
- 2339 ➤ Test Sponsors should consider alternative options for accessibility compliance when it comes
- 2340 to test administration. For example, Test Sponsors who require testing at Test Centers may
- 2341 need to offer at home testing with Online Observation to accommodate Test Takers who can
- 2342 demonstrate that it is a reasonable accommodation for their disability. In the same way, Test
- 2343 Sponsors who offer a Test using Online Observation may need to accommodate Test Takers
- 2344 at a Test Center if they can demonstrate that it is a reasonable accommodation for their
- 2345 disability. Test Sponsors should provide public facing information regarding special
- 2346 accommodations and procedures for requesting such accommodations. Examples of

2347 accommodations specific to the Online Observation of Tests with a Proctor may include
2348 policies and procedures for extended time, frequent breaks, or permitting a Test Taker to
2349 have water in a clear glass on the desk during the Test.

- 2350 ➤ The Test Sponsor’s privacy policy should clearly identify who is the Controller(s) of the Test
2351 Taker’s Personal Information and how to contact the Controller(s) to raise questions, issues,
2352 or concerns, and how to make requests about Personal Information under applicable privacy
2353 laws and regulations.

2354
2355 7.5.2 The Test Sponsor shall provide the Test Taker with the opportunity to become familiar
2356 with the Online Observation process.

- 2357 ➤ Because Online Observation may be new to some Test Takers, it is helpful to provide
2358 opportunities for the Test Taker to become familiar with the process prior to the Test.
- 2359 ➤ Ideally, the Test Taker should have the ability to check the hardware and software
2360 requirements prior to registering for the Test or prior to a Test Session. In addition, an online
2361 tutorial, instructions, or simulated practice test may be offered to assist the Test Taker in
2362 becoming familiar with the Online Observation process.
- 2363 ➤ Where Test Taker accommodations include use of assistive technology, the Test Taker ideally
2364 should be allowed to assess the assistive technology, such as closed captioning or screen
2365 reader tools, to ensure it works with the Online Observation system. Note, however, that
2366 compatibility with the online observation system does not ensure compatibility with the Test
2367 driver or Test content.

2368 7.5.3 Prior to the Test, the Test Sponsor shall ensure Test Takers agree to the Test rules, the
2369 requirements of participating in the Test, and the Online Observation of their Test without
2370 a Proctor.

- 2371 ➤ The agreement should include an acknowledgement that the Test Sponsor has a legal basis
2372 for Processing Test Taker Personal Information and capture explicit consent to the collection
2373 and Processing of Sensitive Personal Information.
- 2374 ➤ Among other things, the agreement should include Test day rules, protocols, and authorized
2375 Test Taker behaviors. The agreement should also set forth the Test Taker authentication
2376 requirements and nondisclosure obligations. Test Takers should agree not to disclose
2377 confidential Test content.
- 2378 ➤ The agreement should also include clear ownership of data and systems, as well as rights for
2379 investigation, score or credential suspension or revocation, retest rules, and prosecution.
- 2380 ➤ The Test Sponsor should also obtain the Test Taker’s explicit consent to the collection and
2381 Processing of their Sensitive Personal Information, such as the capture of Biometric Data or
2382 video recordings of their image and the room where they are testing.

2383

2384 **7.6 Administration and Post-Administration Activities**

2385 7.6.1 The Test Sponsor shall ensure processes are in place for the Online Observation Provider
2386 to promptly notify the Test Sponsor in the event of a significant incident, as defined by
2387 the Test Sponsor’s incident response plan.⁷

- 2388 ➤ A significant incident may include failure of the Online Observation Provider system or a data
2389 breach. A Test Sponsor should consider the service level agreements, such as time to respond
2390 or notice requirements, to include in the incident response plan.
- 2391 ➤ The Test Sponsor should take action as defined within its internal policies and procedures
2392 when a significant event has been reported.

2393
2394 7.6.2 The Test Sponsor shall review reports and data provided by the Online Observation
2395 Provider to identify incidents or Irregularities that warrant additional action by the Test
2396 Sponsor.

- 2397 ➤ Additional data may include Test Launcher or Auditor reports, Irregularity indicators, video
2398 or audio recordings, and response strings.

2399
2400 7.6.3 The Test Sponsor shall notify the Online Observation Provider of any data that must be
2401 preserved and retained or transmitted to the Test Sponsor for additional action.

- 2402 ➤ This may include recorded video or audio files from the Test Session and Test Launcher or
2403 Auditor notes. Only authorized staff should have access to data collected in response to an
2404 Irregularity or other investigation.

2405
2406 7.6.4 The Test Sponsor shall require confirmation from the Online Observation Provider that it
2407 is deleting confidential data and Personal Information in accordance with agreed
2408 retention and destruction plans.

- 2409 ➤ The Test Sponsor should have a data retention policy that sets forth how it is using, storing,
2410 and destroying confidential information, such as testing manuals and other business data,

⁷ Throughout the Standards, the term “incident response plan” is used to describe how the Online Observation Provider should deal with Test Irregularities. It is important to note that a clear distinction exists between a response for Test Session Irregularities (whether those of a technical or operational nature, such as power outages, computer system failures, or those that may be related to the integrity of a testing event, such as discovery of a proxy test taker, test takers talking to one another, unauthorized discussions with a proctor, unauthorized sharing of test items), as compared with a Test Sponsor or Online Observation Service Provider’s response to technical security incidents or data breaches, that impact the security of a data systems or databased, such as unauthorized access to or disclosure of data or compromise of the entity’s systems, which may affect the test administration at any time (pre-administration, during test administration, or post-administration). This distinction is consistent with the separate terms as used in the “Guidelines for Technology-Based Assessment” as published by the ATP and the International Test Commission (“ITC”) (2022). Indeed, the term “Security Incident Response” is defined in the “Guidelines” as: “Actions taken by a testing organization in response to a security incident using a pre-set written response plan to investigate what happened, determine if a data breach occurred, and any remediation steps that should be taken” (TBA, 2022, page 144). Accordingly, users of the Online Observation Standards need to be careful to distinguish between “Test Irregularities” including a response plan developed by a Test Sponsor and an Online Observation Service Provider to respond to such Test Irregularities, and an Information Security Incident Response Plan developed by an entity to handle investigations and remediations of technical security breaches.

- 2411 and a similar data retention policy for Personal Information, including Sensitive Personal
2412 Information. The Online Observation of Tests should be part of those policies.
- 2413 ➤ The Test Sponsor should work with the Online Observation Provider to ensure the parties’
2414 requirements are aligned and require confirmation on a regular basis from the Online
2415 Observation Provider that it is providing secure and timely removal of Personal Information
2416 from all Online Observation systems, including local systems used by the Launcher, Auditor,
2417 and other vendor personnel, in accordance with the Test Sponsor’s agreement or
2418 instructions.
 - 2419 ➤ The Test Sponsor may desire to regularly audit the Online Observation Provider to ensure
2420 adherence to its data retention and destruction policies.
- 2421

2422 **8 Online Observation Provider Requirements and Best Practices for the Online** 2423 **Observation of Tests Without a Proctor**

2424 For ease of review, this section will refer to the Online Observation of Tests without a Proctor as
2425 the Online Observation of Tests. The following clauses set forth the Online Observation Provider’s
2426 activities and responsibilities related to the Online Observation of Tests, with specific focus on
2427 Test administration and post-administration.

2428

2429 It is not uncommon for the Test Sponsor to contract directly with a Technology-Based Test
2430 Delivery Provider who in turn subcontracts with another entity to provide Online Observation
2431 services. To the extent the Online Observation Provider is a subcontractor to a Technology-Based
2432 Test Delivery Provider, these sections should be adapted accordingly.

2433

2434 As stated in the Introduction, this set of standards and best practices does not apply to the
2435 software and services for delivering an online Test. While it is possible that the same organization
2436 offers software to both deliver and observe an online Test, these are two distinct activities, and
2437 the following clauses focus exclusively on the Online Observation Provider’s activities and
2438 responsibilities. Online Observation Providers may work with other technology providers to
2439 administer a Test. Technology-Based Test Delivery Providers, Test Taker management systems,
2440 Test Taker registration systems, voucher systems, and credential management platforms are all
2441 examples of additional technologies which may impact the Test Taker experience and should be
2442 considered as part of the overall testing process.

2443

2444 **8.1 Online Observation Provider Policies and Procedures**

2445 **8.1.1** The Online Observation Provider shall develop, implement, and maintain written
2446 procedures to implement the Online Observation Policies that were mutually agreed
2447 upon with the Test Sponsor.

- 2448 ➤ Typically, these procedures include training for any individuals involved in the check-in or Test
2449 audit process, Irregularity reporting, and incident response activities that align with the Test
2450 Sponsor requirements.

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8.1.2 The Online Observation Provider shall develop, implement, and maintain written procedures to enforce mutually agreed-upon Test Sponsor requirements regarding the use of testing aids during a Test session.

8.1.3 The Online Observation Provider shall develop, implement, and maintain written procedures to implement mutually agreed upon security policies as they relate to the Online Observation of Tests without a Proctor.

- The Online Observation Provider shall develop and implement appropriate written procedures and training to protect the integrity of the testing process and intellectual property assets of the Test Sponsor. All operational staff, support staff, Launchers, and Auditors should understand the Online Observation requirements that may be unique to each Test.
- Security audits should be conducted periodically by both Test Sponsors and Online Observation Providers to confirm the appropriate procedures are routinely followed.

8.1.4 The Online Observation Provider shall develop, implement, and maintain written procedures to implement and enforce mutually agreed upon requirements that control the physical environment to minimize test security threats during the Online Observation process.

- In the event a Launcher is responsible for conducting a scan of the Test Taker environment, the scan should address the risks associated with that Test. The Online Observation Provider should work with the Test Sponsor to develop a process that is appropriate for the use of the Test results and that can be properly implemented using online tools.

8.1.5 The Online Observation Provider shall develop, implement, and maintain written procedures for enforcing mutually agreed upon requirements that manage the digital testing environment and control for Test security threats during the Online Observation process.

- The Online Observation Provider may, for example, monitor the Test Taker device to identify the applications running on the device.

8.1.6 The Online Observation Provider shall develop, implement, and maintain written procedures for enforcing mutually agreed upon requirements to authenticate the Test Taker before and during the Test.

- The Test security measures, including Test Taker authentication, for an Online Test should address the risks associated with that specific Test. The Online Observation Provider should work closely with the Test Sponsor to develop a process that is appropriate for the use of the Test results and that can be properly implemented using online tools.
- Biometric Data may be used during the Test Taker authentication process. If the Test Taker is authenticated using an automated process incorporating Biometric Data, the Online Observation Provider’s process should involve human reviewers to verify rejections received from the automated process. This human review should occur as close to the decision point as possible. The Online Observation Provider should avoid making decisions based on system

2495 output without additional human review. If a biometric is used to authenticate the Test Taker
2496 and human review is not possible before the launch of the Test, the Test Taker should be
2497 allowed to take the Test and the authentication decision can be evaluated after completion
2498 of the Test.

2499 ➤ From a user experience, the Online Observation Provider may be asked to build an integration
2500 to leverage the Technology-Based Test Delivery Provider’s login/SSO/IMS standard to avoid
2501 requiring the Test Taker to maintain separate registration and login information from the
2502 Technology-Based Test Delivery Provider’s platform.

2503
2504 8.1.7 The Online Observation Provider shall develop, implement, and maintain written
2505 procedures for enforcing mutually agreed upon requirements regarding authorized and
2506 unauthorized Test Taker breaks.

2507 ➤ If the Test Sponsor allows for authorized breaks during specific times in the Test, ideally the
2508 Test content should be obscured from view during the authorized break to protect the
2509 content. In that case, the Online Observation Provider should have technical capabilities in
2510 place to plan for the start and stop of the authorized break. After the break, the technical
2511 capabilities should allow for a clear point in proceeding back into the Test. If possible,
2512 whatever authentication capabilities were in place to authenticate the individual at the
2513 beginning of the Test Session should be given following the authorized break as well.

2514 ➤ If the Test Sponsor allows the Test Taker to also take unplanned breaks, the Online
2515 Observation Provider should confirm with the Test Sponsor what type of breaks warrant an
2516 Irregularity indicator, whether and what type of breaks count against the timed Test Session,
2517 and whether and what type of breaks should result in ending the Test Session, if any.

2518
2519 8.1.8 The Online Observation Provider shall develop, implement, and maintain written
2520 procedures to enforce mutually agreed upon policies for responding to and documenting
2521 out-of-compliance physical or digital environments, out-of-compliance identification, and
2522 unauthorized Test Taker behavior.

2523
2524 8.1.9 The Online Observation Provider shall ensure Launchers enforce differing Test Sponsor
2525 requirements during Test Sessions.

2526 ➤ Online Observation Providers should train Launchers on any differences across Test Sponsors’
2527 requirements and how to handle multiple Test administration rules and procedures. It is ideal
2528 if Launchers may be assisted by technology for this as well, such as by automating access to
2529 rules or auto-highlighting differences from standard procedures. It is considered a best
2530 practice for Online Observation Providers to implement a quality control program that allows
2531 for a feedback loop to Launchers to improve performance and support continuous
2532 improvement.

2533
2534 8.1.10 The Online Observation Provider shall develop, implement, and maintain written
2535 procedures for providing mutually agreed-upon disability and other accommodations,
2536 such as religious exceptions, during the Online Observation process.

2537 ➤ Online Observation Providers should only provide those accommodations or exceptions
2538 approved by the Test Sponsor.

- 2539 ➤ Online Observation Providers should assess and update their products and materials to meet
2540 current accessibility standards requirements and best practices. Examples of common Test
2541 Taker accommodations include:
- 2542 • Granting extended time to test;
 - 2543 • Allowing use of chat for communication;
 - 2544 • Permitting use of screen readers;
 - 2545 • Permitting a human reader to read out loud instructions and items verbatim;
 - 2546 • Allowing a scribe to document Test Taker response verbatim;
 - 2547 • Allowing a personal care assistant (not acting in a role as a reader or scribe) to accompany
2548 the Test Taker;
 - 2549 • Allowing a Test Taker to read questions out loud;
 - 2550 • Allowing a service dog in the testing room;
 - 2551 • Allowing additional or off-camera breaks;
 - 2552 • Permitting the use of medications or oxygen during the Test;
 - 2553 • Allowing the Test Taker to have stretch breaks on camera;
 - 2554 • Permitting the Test Taker to perform diabetic testing;
 - 2555 • Permitting the Test Taker to consume food and beverage during the Test.

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2557
2558 8.1.11 The Online Observation Provider shall have written policies and procedures in place to
2559 document, record, and store Test Taker’s Test Session data in accordance with Test
2560 Sponsor agreements.

- 2561 ➤ Regular reviews and audits should be undertaken to ensure proper enforcement of the
2562 collection and retention of Test Session data as agreed between the Test Sponsor and Online
2563 Observation Provider terms under the agreement.
2564

2565 8.1.12 Where the Online Observation Provider collects payment for the Test Session, the Online
2566 Observation Provider or any third-party collecting payment on their behalf shall ensure
2567 its policies and procedures are Payment Card Industry compliant.

- 2568 ➤ Agreements between the Online Observation Provider and Test Sponsor should outline
2569 responsibilities and terms for collection and exchange of payments between Test Takers and
2570 the collecting party. A vendor that provides payment systems should provide evidence that
2571 its policies, procedures, and systems are Payment Card Industry compliant, if requested.

2572

2573 8.2 Online Observation Provider Privacy Policies and Best Practices

2574 8.2.1 The Online Observation Provider shall develop, implement, and maintain written policies
2575 and procedures to protect Personal Information, including Sensitive Personal
2576 Information, captured and Processed during the Online Observation process.

- 2577 ➤ The Online Observation Provider as a Data Processor must follow applicable legal regulations
2578 and the instructions provided by the Controller, unless it has agreed to be a Controller or Co-
2579 Controller and is subject to those Controller legal requirements.

- 2580 ➤ As a Controller or Co-Controller, the Online Observation Provider should implement
2581 protection measures related to securing facilities, training personnel, and data privacy and
2582 protection, retention, and destruction.
- 2583 ➤ Because the laws and regulations protecting Test Taker information can vary by country and
2584 state, best practice is to treat all Personal Information with care and be familiar with
2585 applicable laws and statutes. The Online Observation Provider should identify any data
2586 protection standards to which it adheres.
- 2587 ➤ The Online Observation Provider should review its privacy policies and procedures on a
2588 regular basis to ensure they are current, clearly written, transparent, and compliant with
2589 applicable privacy laws and regulations.

2590
2591 8.2.2 The Online Observation Provider shall Process only the minimum amount of Personal
2592 Information needed for the functioning, integrity, or security of the Online Observation
2593 process.

- 2594 ➤ Data exchange of Personal Information to and from the Online Observation Provider should
2595 only include data needed for the functioning, integrity, or security of the Online Observation
2596 process. This may include, but is not limited to, the integrity and security of the Test, support
2597 of the Test Taker, or performance of the Online Observation platform.

2598
2599 8.2.3 The Online Observation Provider and any Sub-Processor shall document the Personal
2600 Information Processed during the Online Observation process and conduct an inventory
2601 of that data, including where the Personal Information is located and in what systems or
2602 databases it is Processed or stored.

- 2603 ➤ The Online Observation Provider should identify and document the location(s) in which
2604 Personal Information is stored by the Online Observation Provider and/or the Sub-Processor,
2605 where it is hosted, with whom it is shared, and whether the data is transferred across borders.
- 2606 ➤ If Personal Information is stored or moved across borders, the Online Observation Provider
2607 should obtain documentation stating that the Test Sponsor or other Controller has authorized
2608 the transfer and that the data exchange procedures meet applicable legal requirements.
- 2609 ➤ Processing should align with applicable laws and regulations, as well as Controller
2610 instructions. The Online Observation Provider should require that any sub-processors accept
2611 substantially similar obligations.

2612
2613 8.2.4 The Online Observation Provider and any Sub-Processor shall identify any Personal
2614 Information that is considered “sensitive” under the laws or regulations of jurisdictions in
2615 which Test Takers are located during the Test Session and adopt appropriate procedures
2616 for Processing that data.

- 2617 ➤ In some jurisdictions, certain data, such as children’s data, Biometric Data, health data, or
2618 data that indicates the race or ethnicity of an individual, needs special protection or imposes
2619 additional requirements that may affect how it is Processed. For example, in some
2620 jurisdictions, this type of data may be Processed only with the express consent of the Test
2621 Taker or other permissible legal basis. The Online Observation Provider should identify any
2622 Sensitive Personal Information and appropriately protect it during Processing.
- 2623

- 2624 8.2.5 The Online Observation Provider shall maintain and publish a compliant privacy policy
2625 that clearly identifies the purpose(s) for which it Processes the Personal Information of
2626 users of its products or services.
- 2627 ➤ The Online Observation Provider must clearly disclose the purpose for which it processes Test
2628 Taker Personal Information, which may include providing technical support, improving
2629 processes, enhancing the user experience, or improving the technology.
 - 2630 ➤ Example of “purpose” may be collecting Personal Information for the purpose of Test Taker
2631 authentication or to ensure the appropriate Test is given to the appropriate Test Taker.
2632
- 2633 8.2.6 The Online Observation Provider shall limit its use of Personal Information to the stated
2634 purpose(s) and ensure any Sub-Processor also limits use of Personal Information to the
2635 stated purpose(s).
- 2636 ➤ If the Test Sponsor uses Test Taker Personal Information for other purposes, those new
2637 purposes must be disclosed to the Test Taker in a separate notice and meet any jurisdictional
2638 legal approvals and requirements.
2639
- 2640 8.2.7 The Online Observation Provider shall have a written agreement with the Controller that
2641 specifically identifies the services the Online Observation Provider will provide, including
2642 the parties’ responsibilities regarding the collection and Processing of Personal
2643 Information, information security, and any cross-border data transfers.
2644
- 2645 8.2.8 The Online Observation Provider shall document in writing how long different types of
2646 Personal Information are retained. After the retention period, or in the event the Test
2647 Sponsor stops using an Online Observation Provider as a Data Processor, then the Online
2648 Observation Provider shall return, destroy, or anonymize the Personal Information it
2649 holds relating to that Test Sponsor per the terms of the agreement between the parties.
- 2650 ➤ Where the Online Observation Provider is acting as a Processor, it should follow the retention
2651 periods required by the Test Sponsor.
 - 2652 ➤ Where the Online Observation Provider is acting as a Controller, it should document in writing
2653 how long different types of Personal Information are retained. The time period for retaining
2654 each type of Personal Information should be the minimum time necessary to hold that data.
2655 Some types of data, such as copies of government identity documents, can be retained for
2656 less time than other less sensitive data.
 - 2657 ➤ Technical measures should be used to ensure the deletion or anonymization of Personal
2658 Information is irrevocable. The Test Sponsor may permit the Data Processor to retain data if
2659 it has been properly De-identified and cannot be re-identified.
2660
- 2661 8.2.9 Where the Online Observation Provider is acting as a Processor, it shall have a written
2662 policy for coordinating with and following the instructions from the Test Sponsor in the
2663 event a Test Taker submits a request to the Online Observation Provider concerning the
2664 Test Taker’s Personal Information. Where the Online Observation Provider is also a
2665 Controller, it shall publish a publicly accessible privacy policy that addresses Test Taker
2666 requests regarding Personal Information and any circumstances under which requests
2667 may be denied.

- 2668 ➤ The Online Observation Provider should follow the instructions provided by the Controller for
2669 handling Test Taker data requests. For example, the Test Sponsor may instruct the Online
2670 Observation Provider to acknowledge receipt of a data request and then forward the request
2671 directly to the Controller for decision.
- 2672 ➤ Where the Online Observation Provider is also a Controller, it should implement processes to
2673 address Test Taker’s rights related to their Personal Information, including how a Test Taker
2674 can access or receive a copy of their Personal Information or request revisions or deletion of
2675 their Personal Information, as well as any circumstances under which such requests may be
2676 denied. For example, a request to delete Personal Information may be denied if the data
2677 needs to be retained for legitimate reasons, such as an investigation.
- 2678 ➤ Test Taker’s rights related to their Personal Information are determined by applicable laws
2679 and regulations.

2680
2681 8.2.10 The Online Observation Provider shall have written policies and procedures that require
2682 technological and organizational security measures to be in place to protect Personal
2683 Information from destruction, loss, alteration, unauthorized disclosure, unauthorized
2684 access, and unauthorized Processing, including:

- 2685 a) Requiring a Test Taker’s Personal Information to be encrypted at rest and encrypted or
2686 otherwise securely protected in transit;
- 2687 b) Limiting access to Personal Information to only those individuals whose duties require
2688 such access; and
- 2689 c) Requiring that Personal Information collected during the Test Session be returned,
2690 destroyed, or anonymized after the retention period or at the termination of the
2691 agreement with the Test Sponsor in accordance with Test Sponsor’s policies or
2692 instructions.

- 2693 ➤ Online Observation Providers should be familiar with and follow the technical practices for
2694 ensuring the confidentiality, integrity, and availability of Personal Information. For example,
2695 the Online Observation Provider should restrict access to Personal Information to only
2696 authorized individuals, following the principle of least privilege when it pertains to user
2697 access. It should also maintain policies regarding role-based access and permitted activities,
2698 such as “read only,” and be familiar with applicable information security standards.
- 2699 ➤ Online Observation Providers should follow the principles of Privacy by Design and Privacy by
2700 Default in their process and system design. This is an approach to systems development that
2701 requires data protection be taken into account throughout the development process. These
2702 terms have specific meanings in different jurisdictions. For example, in some jurisdictions
2703 these concepts include not only the development of systems but also Processing activities.
- 2704 ➤ Online Observation Providers should conduct regular internal security reviews to ensure the
2705 appropriate protection of Personal Information.
- 2706 ➤ Where practical, Personal Information captured during the Online Observation process
2707 should be held in a De-identified or Psuedonymized form.

2708
2709 8.2.11 The Online Observation Provider shall provide the Test Taker with the ability to end a Test
2710 Session at any time and to remove, deactivate, or uninstall any Online Observation

2711 technology placed on the Test Taker’s personal device, and make such information
2712 publicly available to the Test Taker.

2713 ➤ Removal of the Online Observation technology should return the Test Taker’s personal device
2714 to its initial state. Removal should not create any security risks on the Test Taker’s device.
2715

2716 8.2.12 The Online Observation Provider shall provide annual training in data privacy and
2717 information security to its personnel with authorized access to Personal Information. The
2718 Online Observation Provider shall maintain evidence of, and records of, the training.

2719 ➤ Data privacy training should be provided to any personnel with access to Personal
2720 Information, including but not limited to Launchers and Auditors.

2721 ➤ Training should include applicable regulations, such as FERPA in the United States, PIPL in
2722 China, or GDPR in the European Union. Training should also include requirements for
2723 categorizing, accessing, and protecting Personal Information and Sensitive Personal
2724 Information as well as the legal requirements of confidentiality and the importance of
2725 maintaining chain of custody documents.

2726 ➤ Employee acknowledgments for protecting Personal Information should be a component of
2727 annual privacy training. The Online Observation Provider should periodically assess personnel
2728 to check their understanding of such training.
2729

2730 8.3 Biometrics and Artificial Intelligence

2731 Biometric technologies can be used to improve upon human verification of identity. For example,
2732 an identity can be established from a Biometric capture against an identity document and then
2733 used to assure that the Test Taker remains the same individual throughout the Test session. The
2734 identification could occur using facial recognition, fingerprints, iris scans, or other physical
2735 characteristics that, when independent or pieced together, can be used to identify an individual
2736 against a claimed identity.

2737 Laws regulating the governing the Processing of Biometric Data vary across regions, and new laws
2738 and regulations continue to be enacted. An Online Observation Provider should consider in which
2739 jurisdiction it is operating in order to fully appreciate the rights and obligations of the parties
2740 involved in collecting and Processing Biometric Data. For example, under GDPR Biometric Data
2741 are considered sensitive data and requires heightened protection, including express consent by
2742 the individual with the right to withdraw consent at any given time. In some jurisdictions where
2743 a photograph is used to confirm Test Taker identification, the photograph may be considered
2744 Biometric Data. Given the sensitivity and strict treatment of Biometric Data in the EU, Test
2745 Sponsors delivering Tests in Europe may wish to provide other options, disable use of Biometric
2746 Data, or otherwise ensure that Test Takers can choose not to provide Biometric Data without
2747 adverse consequences.
2748

2749 AI systems and processes rely on algorithms that can predict patterns in data. AI systems can be
2750 used in multiple ways during the Online Observation of Tests, including identifying aberrant Test
2751 Taker or Proctor behaviors based on video or audio data or determining if other Irregularities
2752 occur in the testing environment that can be identified for human review.

2753 While AI systems and processes can help augment human observations, AI can result in and
2754 perpetuate bias. Three categories of bias have been identified: algorithmic prejudice (which
2755 arises when there are correlations between protected features and other factors); negative
2756 legacy bias (which stems from bias in the training data); and underestimation (which occurs when
2757 the data used to train the system is imbalanced, resulting in bias against a defined class). Because
2758 of the potential for bias and discrimination when implementing AI, use of AI in testing has been
2759 under additional scrutiny from the public and from regulators. Laws and regulations governing
2760 the use of AI are continuing to evolve and expand around the world. To remain up to date, Online
2761 Observation Providers should regularly reference the laws and regulations in the localities in
2762 which their Test Takers are located as well as those in which they administer Tests for guidance
2763 on the use of AI.

2764 8.3.1 If Biometric Data are captured during the Online Observation process, the Online
2765 Observation Provider shall ensure the Biometric Data are used only for the stated
2766 purpose, any related security measures are in place, and Biometric Data are retained only
2767 as long as agreed upon with the Test Sponsor.

- 2768 ➤ Online Observation Providers should regularly monitor Processing of Biometric Data and
2769 remediate if bias or discrimination is found or likely to occur.
- 2770 ➤ Online Observation Providers should be prepared to provide evidence to Test Sponsors that
2771 the Online Observation Provider has monitored the use of Biometric Data and taken steps to
2772 mitigate bias or discrimination found, if any. Bias evidence may describe the documentation
2773 of metadata measured and indicating how bias was assessed, the measures of inequity in
2774 training or testing data, the methods used to mitigate data inequity (architectural or training),
2775 measures taken to mitigate group bias, especially in the data labelling phase, and any
2776 measures of inequity in system performance.

2777
2778 8.3.2 The Online Observation Provider shall provide written notice to Test Takers regarding the
2779 Processing of Biometric Data during the Online Observation process, how the Biometric Data will
2780 be used, and the retention period for the Biometric Data.

- 2781 ➤ The Online Observation Provider is often acting as a Processor and collecting Biometric Data
2782 on behalf of the Test Sponsor. In some instances, it may also be acting as a Controller.
- 2783 ➤ Notice provided by the Online Observation Provider should clearly describe the purpose(s)
2784 for collecting Biometric Data. For example, Biometric Data may be used for Test Taker
2785 authentication or security of the Test and Test Session. Notice may also include explanations
2786 of how reference information was obtained, how the sample/claim information was
2787 obtained, the basic chain of Biometric Data Processing (detection, qualification, template
2788 generation, matching, decision), cooperative use expectations, and fall-back processes.
- 2789 ➤ In several jurisdictions, the Controller, or the Online Observation Provider if acting on behalf
2790 of the Controller, must also obtain express written consent from Test Takers before collecting
2791 Biometric Data and allow the Test Taker to withdraw their consent at any time unless there
2792 is another legally permissible ground for Processing.

2793

2794 8.3.3 If Artificial Intelligence is used during the Test Session to identify a suspected Irregularity,
2795 the Online Observation Provider shall compile evidence that the Artificial Intelligence has
2796 been trained and tested to mitigate bias and discrimination.

- 2797 ➤ The Online Observation Provider should evaluate and monitor AI tools it uses in Online
2798 Observation and to limit or mitigate any bias. Monitoring should occur on an ongoing basis,
2799 as bias can be introduced over time based on the data experienced by the algorithm. As
2800 noted in the Introduction, bias evidence may describe the documentation of meta-data
2801 measured and indicating how bias was assessed, the measures of inequity in training or
2802 testing data, the methods used to mitigate data inequity (architectural or training), measures
2803 taken to mitigate group bias (especially in the data labelling phase), and any measures of
2804 inequity in system performance.
- 2805 ➤ The Online Observation Providers should be prepared to provide evidence to Test Sponsors
2806 that it has monitored the use of AI and taken steps to mitigate bias or discrimination found,
2807 if any.

2809 8.3.4 If Artificial Intelligence or automated decision-making tools are used during the Online
2810 Observation process to identify suspected Irregularities, the Online Observation Provider
2811 shall develop processes that enable human review of any decisions made as a result of
2812 using AI or automated decision-making tools during the Online Observation process.

- 2813 ➤ The Test Sponsor shall disclose any automated decision, whether or not rendered by AI, that
2814 has the potential for serious impact on an individual and the process for appealing that
2815 decision to a human reviewer. The Test Sponsor can delegate this responsibility to the Online
2816 Observation provider. Thus, the Online Observation Provider should enable human review
2817 or audit of any data associated with an Irregularity indicator generated by AI, whether
2818 initially, where feasible, or through challenge escalation to human review. Final adjudication
2819 of a decision remains with the Test Sponsor.

2821 8.4 Pre-Contracting and Contracting Considerations with the Test Sponsor or Technology-Based 2822 Test Delivery Provider

2823 The business and contracting structure for delivering a Test using Online Observation may vary.
2824 For example, an Online Observation Provider may work directly with a Test Sponsor, or may work
2825 as a subcontractor to a Technology-Based Test Delivery Provider who has entered into a direct
2826 agreement with a Test Sponsor. This section is intended to address both scenarios.

2827 8.4.1 Prior to entering into an agreement for the Online Observation of Tests, the Online
2828 Observation Provider shall respond to any due diligence requests from the Test Sponsor
2829 and seek to understand the Test observation needs of the Test Sponsor as well as its
2830 corporate structure.

- 2831 ➤ Pre-contracting due diligence is important to help the parties better understand the others'
2832 needs, align expectations, and come to a clear agreement as to their respective
2833 responsibilities. It is common for both parties to share information during this process. It is
2834 recommended that a mutual non-disclosure agreement be in place prior to sharing
2835 confidential or sensitive business information.

- 2836 ➤ During the pre-contracting phase, the Online Observation Provider should be prepared to
2837 respond to Test Sponsor questions regarding its business structure, financial situation, and
2838 business operations, as well as that of any Sub-Processor(s). The information requested may
2839 include where the organization is incorporated, where its primary place of business is located,
2840 where its Launchers and Auditors are located, and how they are trained. This will enable the
2841 parties to align their respective responsibilities and expectations in providing services to Test
2842 Takers and ensure the correct parties are subject to the agreement.
- 2843 ➤ The Online Observation Provider should be prepared to respond to questions about where
2844 Test Taker Personal Information is located, its data privacy and security standards, and other
2845 relevant policies and procedures. This may also include a request to conduct a privacy risk
2846 assessment to better understand the impact the Online Observation Provider's procedures
2847 may have on the Test Sponsor's ability to meet applicable privacy laws and regulations. This
2848 will help the parties properly include contractual obligations in the agreement to protect
2849 Private Information.
- 2850 ➤ The Online Observation Provider should provide the technical interactions of its software
2851 methodology, such as use of collaboration technology, browser plug-ins, browser extensions
2852 or client applications (.exe or dmg file types). It should also provide information regarding the
2853 protocols, procedures, and tools used during the Test Session to observe the Test Taker and
2854 take actions before or during the Test, and any algorithmic or biometric capabilities used by
2855 the Online Observation Provider.
- 2856 ➤ The Online Observation Provider should be prepared to provide information concerning
2857 Launchers' language capabilities, communication skills, and training, as well as information
2858 regarding the requirements for Launcher and Auditor equipment, such as the minimum
2859 screen sizes for Launchers and Auditors, the Launcher to Test Taker ratios available, and the
2860 security measures required for Launcher and Auditor equipment.
- 2861 ➤ In many jurisdictions, Test Sponsors are legally required to provide Test accommodations to
2862 individuals with a disability. The Online Observation Provider should be prepared to explain
2863 the types of accommodations it can effectively provide. For example, extended time and
2864 additional breaks are common requests for testing accommodations that can be effectively
2865 provided and managed during the Online Observation of Tests. In addition, due to religious
2866 requirements, some Test Takers may request a Launcher of the same gender conduct a check-
2867 in process that includes removal of religious headwear. The Online Observation Provider
2868 should be prepared to share with the Test Sponsor the ability to easily accommodate that
2869 type of request.
- 2870 ➤ The Online Observation Provider should be prepared to respond to questions about its
2871 disaster recovery and business continuity processes. The Online Observation Provider should
2872 be prepared to make copies of key written policies available to the Test Sponsor upon
2873 request.
- 2874 ➤ This is also an opportunity for the Online Observation Provider to understand the
2875 organizational and operational structure of the Test Sponsor and the Test Sponsor's unique
2876 needs. For example, it is important to understand the business structure of the entity or
2877 entities requesting Online Observation services. This will enable the Online Observation
2878 Provider to ensure the correct party or parties are included in the agreement.

- 2879 ➤ In addition, the parties should discuss the testing volume anticipated, length of each Test,
2880 and in what format data will be exchanged. Further, Online Observation Providers should
2881 inquire regarding the dates or date ranges needed for Test delivery and what Test Sponsor
2882 roles need access to the Online Observation data.
- 2883 ➤ The Online Observation Provider also should ask about the various systems involved in the
2884 testing process so the parties can better understand how those systems will integrate with
2885 the Online Observation services. For example, other systems may include LMS or CMS
2886 platforms, LTI integrations, API integrations, or Technology-Based Test Delivery integrations.
2887 The Online Observation Provider should also discuss how the parties will collect feedback
2888 from Test Takers regarding their experience, and what information the Test Sponsor will
2889 provide for each Test Session and in what format the information will be shared. This will
2890 help ensure a positive Test Taker experience and secure exchange of data.
- 2891 ➤ The Online Observation Provider should be prepared to advise the Test Sponsor on Online
2892 Observation risks and mitigation strategies. For example, the Online Observation Provider
2893 can point out the potential risk of a Test Taker using a cell phone to capture Test content, and
2894 the possibility for the Online Observation technology to notify an individual in real time of
2895 the incident.

2897 8.4.2 The Online Observation Provider shall enter into a written agreement for Online
2898 Observation services with the Test Sponsor.

- 2899 ➤ As noted above, this agreement may be directly with the Test Sponsor, or with an
2900 intermediate such as a Technology-Based Test Delivery Provider who has a separate
2901 agreement with the Test Sponsor. The agreement should address the business agreement
2902 between the parties, including, among other things, the following topics as they relate to the
2903 Online Observation of Tests:
- 2904 • Test Session requirements, including but not limited to the Test Sponsor’s specifications
2905 concerning Test Taker authentication, device and environment requirements, allowed
2906 testing aids, and Test Taker conduct;
 - 2907 • Security and data privacy requirements, including distinguishing between the
2908 responsibilities and liabilities for the Data Controller and Data Processor;
 - 2909 • Test Taker technology system requirements;
 - 2910 • Online Observation technology protocols to prevent access to unauthorized information;
 - 2911 • Launcher and Auditor training and Launcher conduct requirements;
 - 2912 • Support for Test Takers;
 - 2913 • Online Observation reporting and performance metrics;
 - 2914 • Launcher assignment and conflict of interest requirements;
 - 2915 • Audit rights, indemnification, and insurance obligations, if any;
 - 2916 • Data storage, retention, and destruction requirements; and
 - 2917 • Business continuity and incident response requirements.
- 2918 ➤ During the term of the contract, the Online Observation Provider should conduct periodic
2919 meetings with the Test Sponsor or Technology-Based Test Delivery Provider to ensure
2920 procedural and technical requirements are being met.

2921 ➤ The Online Observation Provider should be prepared to discuss with the Test Sponsor how
2922 release notes or updates to the software will be communicated.
2923

2924 8.5 Pre-Test Communications with the Test Taker regarding Online Observation

2925 8.5.1 The Online Observation Provider shall provide publicly accessible information to the Test
2926 Taker, including:

- 2927 a) the Test Takers' rights and responsibilities regarding use of the Online Observation
2928 Provider website and system, including describing how the Online Observation Provider's
2929 technology interacts with the Test Taker's computer hardware;
- 2930 b) the Test Takers' responsibilities to provide equipment that meets the hardware and
2931 software specifications required for the Test Session and internet connectivity at a
2932 minimum bandwidth;
- 2933 c) any applicable Artificial Intelligence methods used or Biometric Data gathered during the
2934 Online Observation Process;
- 2935 d) instructions for account creation, if required;
- 2936 e) Customer support contact information; and
- 2937 f) Instructions for ending a test and for removing, deactivating or uninstalling any Online
2938 Observation technology.

- 2939 ➤ As an example, hardware and software specifications may include requiring the Test Taker
2940 have a computer, camera, microphone, and adequate internet connection.
- 2941 ➤ The Online Observation Provider ideally should offer information in multiple locations, such
2942 as publishing it on its website and displaying it prior to the start of the Test Session.
- 2943 ➤ Where possible, Test Taker's should be provided this information prior to the Test Session to
2944 allow time for review.

2946 8.5.2 If the Online Observation Provider is a Controller or Co-Controller, communication to the
2947 Test Takers shall include, in simple language, the Online Observation Provider's privacy
2948 policy.

- 2949 ➤ The Online Observation Provider's privacy policy should clearly identify the Online
2950 Observation Provider's role, instructions for how to contact the Controller(s) of Personal
2951 Information, instructions for how to raise questions, issues, or concerns, and to make
2952 requests about Personal Information under applicable privacy laws and regulations.

2954 8.5.3 The Online Observation Provider shall provide the Test Taker with the opportunity to
2955 become familiar with the Online Observation process.

- 2956 ➤ Because Online Observation may be new to some Test Takers, it is helpful to provide
2957 opportunities for the Test Taker to become familiar with the process prior to the Test.
- 2958 ➤ Ideally, the Test Taker should have the ability to review and check the hardware and software
2959 requirements prior to registering for the Test or prior to a Test Session. In addition, an online
2960 tutorial, instructions, or simulated practice test may be offered to assist the Test Taker in
2961 becoming familiar with the Online Observation process.

2962 ➤ Where Test Taker accommodations include use of assistive technology, the Test Taker ideally
2963 should be allowed to assess the assistive technology, such as closed captioning or screen
2964 reader tools, to ensure it works with the Online Observation system. Note, however, that
2965 compatibility with the Online Observation system does not ensure compatibility with the Test
2966 driver or Test content.

2967
2968 8.5.4 The Online Observation Provider shall develop, implement, and maintain written policies
2969 and procedures to ensure that any individuals interacting with the Online Observation
2970 Provider’s system or platform are aware when the Online Observation Provider is
2971 launching and shutting down the Online Observation system or platform.

2972 ➤ In addition to written notices, the Online Observation Provider may want to develop scripts
2973 for Launchers and acknowledgement steps to share with Test Takers when they are logging
2974 in, accessing the platform, and launching the Test.

2975

2976 8.6 Administration and Post-Administration Activities

2977 For the administration of the Test Session, either the Online Observation Provider or another
2978 entity may provide customer support agents to assist Test Takers or to audit the recorded Test
2979 Session after the event. We have addressed both possibilities in this section.

2980 8.6.1 The Online Observation Provider shall ensure processes are in place to promptly notify
2981 the Test Sponsor in the event of a significant incident, as defined by the Test Sponsor’s
2982 incident response plan.

2983 ➤ The Online Observation Provider should seek to assist the Test Sponsor in identifying and
2984 defining what is considered a significant incident, and the appropriate responses to take
2985 during the Test Session. A significant incident may include events such as failure of the Online
2986 Observation system or a data breach.

2987 ➤ Particularly in the case in which the system is down, the Test Sponsor, Online Observation
2988 Provider, and any other vendors involved in the Test Session, should have an agreed upon
2989 action plan. This may include proactive outreach to Test Takers and offers to reschedule the
2990 Test Session at no additional charge.

2991
2992 8.6.2 Before the start of the Test Session, the Online Observation Provider shall make its Terms
2993 of Service publicly available to Test Takers.

2994 ➤ The Online Observation Provider can make these terms available on its primary website, in
2995 the form of a scrollable End User License Agreement or by incorporating this information into
2996 the testing process and having a click-through agreement prior to the Test that a Test Taker
2997 must accept before continuing to the Test.

2998
2999 8.6.3 Prior to launching the Test, the Online Observation Provider system shall implement the
3000 Test Taker authentication requirements provided by the Test Sponsor.

3001 ➤ At this point in the process, the Online Observation Provider or its technology ideally should
3002 notify the Test Taker that Online Observation has started.

3003 ➤ As noted above, the Test Sponsor and Online Observation Provider should agree upon any
3004 required authentication methods. The parties should also agree upon the protocols to be
3005 followed if a Test Taker cannot be authenticated, as those will vary. Some Test Sponsors may
3006 prefer to allow the Online Observation Provider to record the Irregularity but still continue to
3007 the Test; others may prefer to not launch the Test and to instruct the Test Taker to reschedule
3008 the Test Session.
3009

3010 8.6.4 Prior to the launch of the Test, the Online Observation Provider shall require the Test
3011 Taker to ensure any equipment necessary for the Test Session is compatible with the
3012 Online Observation Provider’s technology and in working order.

3013 ➤ The Online Observation Provider may wish to have an automated system compatibility check
3014 that determines whether the Test Taker’s bandwidth and other equipment, such as the
3015 microphone and camera, are acceptable and working for the Test Session. In addition, the
3016 Online Observation Provider may conduct a scan for additional monitors or virtual machines
3017 at this time.

3018 ➤ If the Online Observation event requires installation of monitoring or other software on the
3019 Test Taker’s device, the monitoring software should only be active during the Test Session
3020 and should not collect data at other times. The software should be capable of being
3021 uninstalled after the Test.

3022 ➤ If the Test Taker’s equipment is not compatible with the Online Observation Provider’s
3023 technology and cannot be addressed through trouble shooting protocols, a customer support
3024 agent should be provided a script for informing the Test Taker what to do next. For example,
3025 the customer support agent could suggest the Test Taker switch machines or reschedule the
3026 Test.
3027

3028 8.6.5 The Online Observation Provider shall provide a capability to interact with the Test Taker
3029 in real time during the Test Session.

3030 ➤ An Online Observation Provider may need to interact with a Test Taker during a Test Session
3031 for non-technical support reasons. For example, the Online Observation system may take
3032 note of insufficient lighting in the Test Taker’s environment and message the Test Taker via
3033 chat in real time that the environment is not in compliance.
3034

3035 8.6.6 The Online Observation Provider shall provide information to the Test Taker concerning
3036 the process for technical or first level support.

3037 ➤ The Online Observation Provider should provide this information on its website and on the
3038 Test Taker’s screen while the Online Observation Provider software is running. In addition,
3039 the entity providing the customer support agents can develop scripts to be used by agents to
3040 follow when interacting with the Test Taker. This will enable technical support agents to help
3041 address Test Taker issues promptly and consistently.
3042

3043 8.6.7 The Online Observation system shall record the Test Taker’s physical and digital testing
3044 environment before and during the Test to capture evidence of compliance with Test
3045 Sponsor requirements.

- 3046 ➤ The Online Observation system may identify as an Irregularity any issues, and ideally identify
3047 any out-of-compliance aspects that need to be addressed for the Test to launch or continue.
3048 ➤ If at any time the physical or digital environments go out of compliance, efforts may be made
3049 by the Online Observation Provider to either systematically interact with the Test Taker to
3050 alert the Test Taker of the need to bring the environment back into compliance, or have a
3051 notification process to alert the Test Sponsor of what occurred. For example, if a Test Taker
3052 attempts to “print screen” in an effort to copy content, the online observation system may
3053 be configured to interdict the command or to send a message to the Test Taker that such
3054 behavior is out of compliance and prohibited.
3055 ➤ If prior to or during the Test Session it is necessary for the Test Taker to use different
3056 equipment, the Online Observation system should conduct an additional equipment check
3057 on the new device(s) prior to launching or re-launching the Test Taker’s access to the Test.
3058

3059 8.6.8 Once the test is launched, the Online Observation Provider shall use approved
3060 technologies to observe the Test Taker and the environment and report on any potential
3061 Irregularities.

- 3062 ➤ The Online Observation Provider should use technology to record evidence of the Test
3063 Session and identify any Irregularity in a report to the Test Sponsor. Examples of rules
3064 commonly required by a Test Sponsor may include:
- 3065 • Test Taker must clear workspace and the surrounding area prior to launch of the Test;
 - 3066 • Test Taker may not use dual monitors;
 - 3067 • Test Taker must be connected to a power source;
 - 3068 • Test Taker may not have access to phones;
 - 3069 • Test Taker may not wear ear plugs or headphones;
 - 3070 • Test Taker must be alone in the room;
 - 3071 • Test Taker is not permitted to talk or read aloud after the Test Session begins;
 - 3072 • Test Taker’s webcam, speakers, and microphone must remain on throughout the Test;
3073 and
 - 3074 • Test Taker must stay in view of the webcam for the duration of the Test.
- 3075 ➤ The Test Sponsor may request regional differences in instructions to address localization
3076 needs.
3077

3078 8.6.9 At the end of the Online Observation session, the Online Observation Provider shall:

- 3079 a) Remove, or provide instructions to remove, any temporary authorized files on the local
3080 systems used for the purposes of Online Observation;
- 3081 b) Provide secure and timely reports of Test Session data to the Test Sponsor;
- 3082 c) Make additional information regarding any Irregularity available to a Test Sponsor upon
3083 request; and
- 3084 d) Retain Online Observation Test Session data in accordance with Test Sponsor agreements.

- 3085 ➤ The Online Observation system should check that the Test Session has closed for security
3086 purposes and, if that has not occurred, report it as an Irregularity. Note, however, that the
3087 ability to conduct this check is dependent on the technical integration between the driver

- 3088 provided by the Technology-Based Test Delivery Provider and the Online Observation system
3089 and thus may not be available in all instances.
- 3090 ➤ The system should indicate to the Test Taker that Online Observation has stopped. Ideally,
3091 the system should automatically remove any temporary authorized files on the local systems
3092 used by the Test Taker during the Test Session.
 - 3093 ➤ The Online Observation Provider should periodically report data to Test Sponsors. Common
3094 data provided to Test Sponsors include Tests completed and suspected or confirmed
3095 incidents of rule violations.
 - 3096 ➤ The Online Observation Provider should periodically conduct reviews of incidents to
3097 determine whether other activities can be taken to mitigate against future incidents.

3098 **C. Requirements and Responsibilities for Proctors, Auditors, 3099 and Launchers**

3100 **9 Requirements and Responsibilities for Launchers**

3101
3102 Launchers may be supplied by the Online Observation Provider or by other entities, such as the
3103 Test Sponsor or another third-party provider. This section is directed specifically to the
3104 requirements of Launchers, regardless of who is supplying the Launcher.
3105

3106 **9.1 Launchers shall be qualified and trained to perform their roles.**

- 3107 ➤ The entity providing the Launchers should follow hiring best practices when selecting
3108 Launchers including consideration of appropriate background checks.
- 3109 ➤ The entity providing the Launchers is responsible for ensuring the Launchers are qualified and
3110 trained to perform their role. This includes comprehensive onboarding and regular training
3111 to ensure competency.
- 3112 ➤ Launcher training should include, but is not limited to, training on effectively authenticating
3113 an individual and on Processing and protecting Test Taker Personal Information. The entity
3114 providing the Launchers may wish to implement a Launcher assessment, to ensure the
3115 Launchers understand the training provided and their roles and responsibilities.
- 3116 ➤ If processes are not adhered to by the Launchers, the entity providing the Launchers should
3117 have a policy for providing remediation training and verification of competencies or event
3118 termination if the level of malfeasance warrants. The entity providing the Launcher should
3119 gather information to demonstrate adherence to its training and remediation policies.
3120

3121 **9.2 The entity providing Launchers shall enter into written agreements with individual Launchers 3122 that require disclosure of conflicts of interest as well as the protection of Test Taker Personal 3123 Information.**

- 3124 ➤ Because Launchers may become privy to confidential information, including Test Taker
3125 Personal Information, Launchers are required to agree to keep such information secure and
3126 confidential. It is best practice to train Launchers on these obligations so they are aware of
3127 the scope of their responsibility and potential consequences should they breach their
3128 agreement.

3129 ➤ Launchers should be objective in authenticating Test Takers and reviewing the digital and
3130 physical environments prior to launching the Test. Launchers should be required to disclose
3131 any real or potential conflicts of interest prior to launching a Test Session. For example,
3132 certain relationships, such as familial or employer relationships, can create a real or perceived
3133 conflict of interest. The Test Sponsor should make clear what it considers to constitute a
3134 conflict of interest and provide a clear communication path for when conflict of interest
3135 incidents arise. For example, certain relationships, such as familial or employer relationships,
3136 can create a real or perceived conflict of interest. Launchers should have a clear
3137 communication path for reporting a real or potential conflict. In addition to disclosure,
3138 Launchers should receive periodic training and reminders regarding what constitutes a
3139 conflict of interest and to whom a real or potential conflict should be reported.
3140

3141 9.3 Where situations arise that pose or appear to pose a conflict of interest, security, or safety
3142 concern, the entity providing the Launchers shall take corrective actions to ensure they are
3143 mitigated.

3144 ➤ Steps taken to address conflicts of interest and any corrective actions implemented should
3145 be documented to provide consistency and demonstrate adherence to policy.
3146

3147 9.4 The entity providing the Launchers shall develop, implement, and maintain documented
3148 policies and procedures that describe the roles, responsibilities, technology, and data privacy
3149 and protection, and security requirements for Launchers.

3150 ➤ Launcher policies and procedures should be reviewed regularly to incorporate updates and
3151 new compliance requirements.
3152

3153 9.5 Launchers shall have adequate internet bandwidth and other tools that meet the technical
3154 requirements set by the Online Observation Provider to check-in Test Takers without
3155 interruption.

3156 ➤ Launchers should receive written information from the entity supplying the Launchers setting
3157 forth what constitutes an adequate internet connection to effectively use the Online
3158 Observation Provider's system.

3159 ➤ The locations at which Launchers may check-in Test Takers may vary. For example, some
3160 Online Observation Providers allow Launchers to work from home but others require
3161 Launchers to perform their duties in a centralized office space, and others allow for a mix of
3162 at home and centralized office activities. Wherever Launchers are allowed to perform their
3163 work, Launchers should be required to demonstrate they have access to sufficient bandwidth
3164 to allow for a seamless connection experience.

3165 ➤ Similarly, the entity providing the Launchers should work with the Online Observation
3166 Provider to provide written hardware and software specifications to ensure adequate
3167 performance within the Online Observation Provider's system.

3168 ➤ Launchers shall have all software and hardware necessary to perform their role. Typically,
3169 the entity supplying the Launchers will provide the software and hardware needed by the
3170 Launchers. By providing these tools, the entity supplying the Launchers can leverage security
3171 features such as multi-factor authentication, undertake periodic compliance reviews, and
3172 more easily perform trouble shooting should issues arise. In addition, the hardware and

3173 software design should incorporate accessibility standards, such as avoiding use of color
3174 alone to indicate an issue, as a colorblind individual will not tell the difference between
3175 indicators.

3176 ➤ Any device used by the Launcher to perform online observation shall meet the Online
3177 Observation Provider’s security specifications. These may include the ability to perform
3178 multi-factor authentication, antivirus protections, malware protection, installation of security
3179 patches, firewall protection, authentication, password complexity, encryption, and device
3180 lock or log out. During the Online Observation Process, the Launcher’s device may be
3181 prevented from taking screenshots and from downloading or storing Test Taker recordings.
3182 It is considered best practice to periodically confirm compliance with these specifications.
3183

3184 9.6 There shall be no Test Taker data or Personal Information stored on the Launcher’s device
3185 used for checking in the Test Taker after the Test is launched.
3186

3187 9.7 The Launcher’s work environment shall be suitable to deliver focused work and free of any
3188 individuals who are not subject to a confidentiality agreement.

3189 ➤ Launchers should focus their full attention on authenticating the Test Taker and confirming
3190 the digital and physical environment meets Test Sponsor requirements. To that end, it is
3191 helpful if the Launcher’s work environment is quiet and should be free of distractions.
3192

3193 9.8 The entity supplying the Launchers shall develop, implement, and maintain a process to
3194 monitor and audit Launchers for quality assurance and training purposes.

3195 ➤ Establishing a uniform process promotes consistency, and auditing those processes help to
3196 confirm compliance. Audits can be conducted either online or in person, and should be
3197 undertaken on a periodic basis. Results may be, but are not required to be, provided to Test
3198 Sponsors. Test Sponsors may also desire to perform their own audits of Launchers.
3199

3200 9.9 Launchers shall be trained to, among other things, use the Online Observation Provider’s
3201 technology, recognize and record Irregularities, understand specific data privacy and
3202 protection, and security requirements of the Online Observation Provider and Test Sponsor,
3203 and appropriately handle and protect Test Taker Personal Information.

3204 ➤ Training should be provided on a regular basis to help promote consistent and high-quality
3205 performance by the Launcher. Training should include the importance of, and protocols for,
3206 protecting Test Taker Personal Information. Training on the security of Test Taker Personal
3207 Information should occur on an annual basis. The entity providing the Launchers should keep
3208 a record of the training dates and a copy of the training materials.
3209

3210 9.10 Launchers shall be provided clear instructions concerning how to resolve environmental
3211 factors that could impact the security of the Test.

3212 ➤ Some environmental factors may negatively impact test integrity and score validity, such as
3213 poor lighting that makes it difficult to clearly view the Test Taker or unauthorized electronic
3214 devices visible in the testing space. Clear instructions should be provided to the Launchers to
3215 correct concerning environmental issues during check-in, as well as what to do if these issues

3216 cannot be corrected. To provide consistent treatment of Test Takers, it is best practice to
3217 give Launchers standardized scripts and protocols for addressing common issues.

3218
3219 9.11 The Launchers shall follow Test Sponsor instructions for Test Taker accommodations
3220 when administering a Test.

3221 ➤ Launchers should receive training regarding accommodations and receive clear instructions
3222 concerning specific Test Taker accommodations prior to launching a Test.

3223
3224 9.12 Launchers shall follow Test Sponsor requirements to authenticate the individual
3225 presenting to test.

3226 ➤ Test Sponsors may require the Launcher to verify that the individual appearing for a Test
3227 Session matches the information presented on an appropriate identification card. The
3228 Launcher should confirm if the name on the card matches the name of the individual
3229 presenting to test. If the card includes a photo, the Launcher should determine whether the
3230 photo matches the individual presenting to test. If the Launcher is unable to authenticate the
3231 individual, the Launcher should follow the requirements set forth by the Test Sponsor
3232 regarding whether to complete check-in and how to document the Irregularity.

3233
3234 9.13 The Launcher shall confirm the physical and digital testing environments are compatible
3235 with the Test Sponsor and Online Observation Provider specifications prior to completing
3236 check-in.

3237 ➤ The Launcher should have the ability to monitor the physical testing environment by both
3238 sight and by sound. Should the testing environment be out of compliance with the Test
3239 Sponsor or Online Observation Provider requirements at any time before check-in is
3240 complete, the Launcher should follow the protocols established by the Test Sponsor.

3241
3242 9.14 The Launchers shall report any Irregularities noted during check-in of the Test Taker based
3243 upon the Online Observation Provider and Test Sponsor specifications.

3244

3245 **10 Requirements and Responsibilities for Proctors**

3246 Proctors may be supplied by the Online Observation Provider or by other entities, such as the
3247 Test Sponsor or another third-party provider. This section is directed specifically to the
3248 requirements of Proctors, regardless of who is supplying those individuals.

3249 10.1 Proctors shall be qualified and trained to perform their roles.

3250 ➤ The entity providing Proctors should follow hiring best practices when selecting Proctors,
3251 including consideration of appropriate background checks.

3252 ➤ The entity providing the Proctors is responsible for ensuring the Proctors are qualified and
3253 trained to perform their role. This includes comprehensive onboarding and regular training
3254 to ensure competency.

3255 ➤ Proctor training should include, but is not limited to, training on the protection of Test
3256 content, other intellectual property, and on Processing and protecting Test Taker Personal

3257 Information. Proctor assessments may be used to ensure the Proctors understand the
3258 training provided and their roles and responsibilities.

- 3259 ➤ If processes are not adhered to by the Proctor, the entity providing the Proctor should have
3260 a policy for providing remediation training and verification of competencies or even
3261 termination if the level of malfeasance warrants. The entity providing the Proctors should
3262 gather information to demonstrate adherence to its training and remediation policies.

3263

3264 10.2 The entity providing Proctoring services shall enter into written agreements with
3265 individual Proctors that require disclosure of conflicts of interest as well as a commitment to
3266 the protection of Test content, other intellectual property, and Test Taker Personal
3267 Information.

- 3268 ➤ Because Proctors may become privy to confidential information, including Test Sponsor
3269 intellectual property and Test Taker Personal Information, Proctors are required to agree to
3270 keep such information secure and confidential. It is best practice to train Proctors on these
3271 obligations so they are aware of the scope of their responsibility and potential
3272 consequences should they breach their agreement.
- 3273 ➤ Proctors should be objective in the delivery and observation of the Test Session. Proctors
3274 should be required to disclose any real or potential conflicts of interest prior to launching a
3275 Test Session. For example, certain relationships, such as familial or employer relationships,
3276 can create a real or perceived conflict of interest. Proctors should have a clear
3277 communication path for reporting a real or potential conflict. In addition to disclosure,
3278 Proctors should receive periodic training and reminders regarding what constitutes a conflict
3279 of interest and to whom a real or potential conflicts should be reported.

3280

3281 10.3 Where situations arise that pose or appear to pose a safety, conflict of interest, or
3282 security concern, the entity providing the Proctors shall take corrective actions to ensure they
3283 are mitigated.

- 3284 ➤ Steps taken to address conflicts of interest and any corrective actions implemented should
3285 be documented to provide consistency and demonstrate adherence to policy.

3286

3287 10.4 The entity providing the Proctors shall develop, implement, and maintain documented
3288 policies and procedures that describe the roles, responsibilities, technology, and data privacy
3289 and protection, and security requirements for Online Proctors.

- 3290 ➤ Proctor policies and procedures should be reviewed regularly to incorporate updates and
3291 new compliance requirements.

3292

3293 10.5 Proctors shall have adequate internet bandwidth and other tools that meet the technical
3294 requirements set by the Online Observation Provider to observe Test Takers without
3295 interruption.

- 3296 ➤ The Proctors should receive written information from the entity supplying the Proctors
3297 setting forth what constitutes an adequate internet connection to effectively use the Online
3298 Observation Provider's system.

- 3299 ➤ The locations at which Proctors may perform Online Observation may vary. For example,
3300 some Online Observation Providers allow Proctors to work from home, others require
3301 Proctors to perform their duties in a centralized office space, and others allow for a mix of at
3302 home and centralized office activities. Wherever Proctors are allowed to perform their work,
3303 Proctors should be required to demonstrate they have access to sufficient bandwidth to allow
3304 for a seamless connection experience.
- 3305 ➤ Similarly, the entity providing the Proctors should work with the Online Observation Provider
3306 to provide written hardware and software specifications to ensure adequate performance
3307 within the Online Observation Provider’s system.
- 3308 ➤ Proctors shall have all software and hardware necessary to perform their role. Typically, the
3309 entity supplying the Proctors will provide the software and hardware needed by the Proctors.
3310 By providing these tools, the entity supplying the Proctors can leverage multi-factor
3311 authentication, undertake periodic compliance reviews, and more easily perform trouble
3312 shooting should issues arise. In addition, the hardware and software design should
3313 incorporate accessibility standards, such as avoiding use of color alone to indicate an issue,
3314 as a colorblind individual will not tell the difference between indicators.
- 3315 ➤ Any device used by the Proctor to perform online observation shall meet the Online
3316 Observation Provider’s security specifications. These may include the ability to perform
3317 multi-factor authentication, antivirus protections, malware protection, installation of security
3318 patches, firewall protection, authentication, password complexity, encryption, and device
3319 lock or log out. During the Online Observation Process, the Proctor’s device may be
3320 prevented from taking screenshots and from downloading or storing Test Taker recordings.
3321 It is considered best practice to periodically confirm compliance with these specifications.
3322

3323 10.6 There shall be no Test Taker data or Personal Information stored on the Proctor’s device
3324 used for observing the Test after the Test Session is completed.

3326 10.7 The Proctor’s work environment shall be suitable to focused work and free of any
3327 individuals who are not subject to a confidentiality agreement.

- 3328 ➤ Proctors should focus their full attention on the Tests being observed. To that end, it is helpful
3329 if the Proctor’s work environment is quiet and free of distractions. The entity supplying the
3330 Proctors should have back-up available to observe the Test in the event the Online Proctor
3331 needs a break.
3332

3333 10.8 The entity supplying the Proctors shall develop, implement, and maintain a process to
3334 monitor and audit Proctors for quality assurance and training purposes.

- 3335 ➤ Establishing a uniform process promotes consistency and auditing those processes help to
3336 confirm compliance. Audits can be conducted either online or in person, and should be
3337 undertaken on a periodic basis. Results may be, but are not required to be, provided to Test
3338 Sponsors. Test Sponsors may also desire to perform their own audits of Proctors.
3339

3340 10.9 Proctors shall be trained and required to, among other things, use the Online Observation
3341 Provider’s technology, recognize and record Irregularities, understand specific data privacy

3342 and protection and security requirements of the Online Observation Provider and Test
3343 Sponsor, and appropriately handle and protect Test Taker Personal Information.

3344 ➤ Training should be provided on a regular basis to help promote consistent and high-quality
3345 performance by the Proctor. Training should include the importance of, and protocols for,
3346 protecting Test content and other intellectual property as well as Test Taker Personal
3347 Information. Training on the security of Test Taker Personal Information should occur on an
3348 annual basis. The entity providing the Proctors should keep a record of the training dates and
3349 a copy of the training materials.

3350
3351 10.10 Proctor shall be provided clear instructions concerning how to resolve environmental
3352 factors that could impact the security of the Test.

3353 ➤ Some environmental factors may negatively impact test integrity and score validity, such as
3354 poor lighting that makes it difficult to clearly view the Test Taker or unauthorized electronic
3355 devices visible in the testing space. Clear instructions should be provided to the Proctor to
3356 correct concerning environmental issues as well as what to do if these issues cannot be
3357 corrected. To provide consistent treatment of Test Takers, it is best practice to give Proctors
3358 standardized scripts and protocols for addressing common issues.

3359
3360 10.11 The Proctor shall follow Test Sponsor instructions for Test Taker accommodations when
3361 administering a Test.

3362 ➤ Proctors should receive training regarding accommodations and receive clear instructions
3363 concerning specific Test Taker accommodations prior to launching a Test.

3364
3365 10.12 Proctors shall correctly enforce differing Test Sponsor requirements during concurrent
3366 Online Observation sessions.

3367 ➤ Proctors are responsible for following clearly outlined Test Sponsor requirements for
3368 introduction, launch, and observation during the test and intervention, if required.

3369 ➤ Because some Test Sponsor requirements differ, providing scripts and protocols to Proctors
3370 is best practice in helping Proctors act in accordance with Test Sponsor expectations.

3371
3372 10.13 If no Launcher is provided, then prior to launching a Test, the Proctor shall follow Test
3373 Sponsor requirements to authenticate the individual presenting to test.

3374 ➤ Test Sponsors may require the Proctor to verify that the individual appearing for a Test
3375 Session matches the information presented on an appropriate identification card. The
3376 Proctor should confirm if the name on the card matches the name of the individual presenting
3377 to test. If the card includes a photo, the Proctor should determine whether the photo matches
3378 the individual presenting to test. If the Proctor is unable to authenticate the individual, the
3379 Proctor should follow the requirements set forth by the Test Sponsor regarding whether to
3380 launch the Test and how to document the Irregularity.

3381
3382 10.14 If no Launcher is provided, then prior to launching the Test, the Proctor shall confirm the
3383 physical and digital testing environments are compatible with the Test Sponsor and Online
3384 Observation Provider specifications, and the Proctor shall monitor the physical and digital
3385 testing environments throughout the Test Session for continued compliance.

3386 ➤ The Proctor should have the ability to monitor the physical testing environment by both sight
3387 and by sound. Should the testing environment be out of compliance with the Test Sponsor
3388 or Online Observation Provider requirements at any time before or during the Test, the
3389 Proctor should follow the protocols established by the Test Sponsor.
3390

3391 10.15 The Proctor shall not provide Test Takers with assistance on or answers to Test questions.

3392 ➤ Under no circumstances should a Proctor provide Test Takers with assistance on the Test or
3393 answers to Test questions. A Proctor who is found to have engaged in this type of conduct
3394 should immediately be removed from observing that Test. The entity providing the Proctor
3395 should engage in appropriate remediation, up to and including termination of the Proctor.
3396

3397 10.16 The Proctor shall protect Test content and other intellectual property of the Test Sponsor
3398 during the Test Session.

3399 ➤ It is critical that the Proctor understand the importance of protecting Test content and the
3400 steps to be taken if content is at risk because of actions by a Test Taker. Test content is costly
3401 to produce and the confidentiality of the content is an important factor in the Test Sponsor's
3402 ability to deliver valid scores. The Proctor should follow the protocols provided by the Test
3403 Sponsor concerning the protection of Test content, which may include intervening in the Test
3404 Session to provide the Test Taker a warning or immediately ending a Test Session if Test Taker
3405 behavior puts the Test content at risk.
3406

3407 10.17 The Proctor shall control the Test Session and intervene in accordance with the Test
3408 Sponsor's written instructions.

3409 ➤ The Proctor should receive clear instructions from the Test Sponsor and the entity providing
3410 the Proctors concerning when intervention is appropriate and how to properly intervene.
3411 ➤ The Proctor should understand the criteria for intervention and how to effectively intervene
3412 if the Test Taker's behavior is violating the Test Sponsor's rules or harm to the Test Sponsor's
3413 intellectual property or Test Taker is imminent. For example, there may be instances where
3414 intervention and refusal to start the Test is appropriate because the Test Taker failed to wear
3415 clothing to the Test Session. As another example, intervention may also be appropriate if the
3416 Test Taker is threatening self-harm. Additional examples include instances where a Test
3417 Taker's environment goes out of compliance, such as when another individual enters the
3418 room, or the Test Taker's behavior violates the rules of the Test, such as using a book on a
3419 closed-book Test.
3420

3421 10.18 Provided there has not been an Irregularity that requires early termination of a Test
3422 Session, the Proctor shall not end the Online Observation activities before the Test Taker
3423 ends the Test or exits the session.

3424 ➤ A Proctor should not end an Online Observation prematurely in the absence of an Irregularity
3425 that warrants it.
3426 ➤ Depending on the software, the Proctor may not have the ability to see the Test questions.
3427 The Technology Based Testing vendor should clearly indicate whether or not the Test Session
3428 has been successfully ended.
3429

3430 10.19 The Proctor shall report any Irregularities based upon Test Sponsor and Online
3431 Observation Provider specifications.

- 3432 ➤ The Proctor should follow any templated format for reporting Irregularities that arise
3433 during the Testing Session.

3434

3435 **11 Requirements and Responsibilities for Auditors**

3436 Auditors may be supplied by the Online Observation Provider or by other entities, such as the
3437 Test Sponsor or another third-party provider. This section is directed specifically to the
3438 requirements of Auditors, regardless of who is supplying the Auditor.

3439 **11.1 Auditors shall be qualified and trained to perform their roles.**

- 3440 ➤ The entity providing the Auditors should follow hiring best practices when selecting Auditors
3441 including consideration of appropriate background checks.

- 3442 ➤ The entity providing the Auditors is responsible for ensuring the Auditors are qualified and
3443 trained to perform their role. This includes onboarding and regular training to ensure
3444 competency.

- 3445 ➤ Auditor training should include, but is not limited to, training on the protection of Test
3446 content, other intellectual property, and on Processing and Protecting Test Taker Personal
3447 Information. Then entity providing Auditors may wish to implement Auditor assessments to
3448 ensure the Auditors understand the training provided and their roles and responsibilities.

- 3449 ➤ If processes are not adhered to by an Auditor, the entity providing the Auditors should have
3450 a policy for providing remediation training and verification of competencies or even
3451 termination if the level of malfeasance warrants. The entity providing the Auditors should
3452 gather information to demonstrate adherence to its training and remediation policies.

3453

3454 **11.2 The entity providing test session auditing services shall enter into written agreements
3455 with individual Auditors that require disclosure of conflicts of interest as well as the protection
3456 of Test content, other intellectual property, and Test Taker Personal Information.**

- 3457 ➤ Because Auditors may become privy to confidential information, including Test Sponsor
3458 intellectual property and Test Taker Personal Information, Auditors are required to agree to
3459 keep such information secure and confidential. It is best practice to train Auditors on these
3460 obligations so they are aware of the scope of their responsibility and potential consequences
3461 should they breach their agreement.

- 3462 ➤ Auditors should also be objective in the review of a Test Session. Auditors should be required
3463 to disclose any real or potential conflicts of interest prior to review of a Test Session. For
3464 example, certain relationships, such as familial or employer relationships, can create a real or
3465 perceived conflict of interest. Auditors should have a clear communication path for reporting
3466 a real or potential conflict. In addition to disclosure, Auditors should receive periodic training
3467 and reminders regarding what constitutes a conflict of interest and to whom a real or
3468 potential conflicts should be reported.

3469

3470 11.3 Where situations arise that pose or appear to pose a conflict of interest, security, or
3471 safety concern, the entity providing the Auditors shall take corrective actions to ensure they are
3472 mitigated.

- 3473 ➤ Steps taken to address conflicts of interest and any corrective actions implemented should
3474 be documented to provide consistency and demonstrate adherence to policy.

3475
3476 11.4 The entity providing the Auditors shall develop, implement, and maintain documented
3477 policies and procedures that describe the roles, responsibilities, technology, and data privacy and
3478 protection and security requirements for Auditors.

- 3479 ➤ Auditor policies and procedures should be reviewed regularly to incorporate updates and
3480 new compliance requirements.

3481
3482 11.5 Auditors shall have adequate internet bandwidth and other tools required to meet the
3483 technical requirements set by the Online Observation Provider to audit Test Sessions.

- 3484 ➤ The entity providing the Auditors should work with the Online Observation Provider to
3485 provide written internet, hardware, and software specifications necessary to ensure
3486 adequate performance within the Online Observation Provider's system.

- 3487 ➤ Auditors shall have all software and hardware necessary to perform their role. Typically, the
3488 entity supplying the Auditors will provide the software and hardware needed by the Auditors.
3489 By providing these tools, the entity supplying the Auditors can leverage multi-factor
3490 authentication, undertake periodic compliance reviews, and more easily perform trouble
3491 shooting should issues arise. In addition, the hardware and software design should
3492 incorporate accessibility standards, such as avoiding use of color alone to indicate an issue,
3493 as a colorblind individual will not tell the difference between indicators.

- 3494 ➤ Any device used by the Auditors to perform online observation shall meet the Online
3495 Observation Provider's security specifications. These may include the ability to perform
3496 multi-factor authentication, antivirus protections, malware protection, installation of security
3497 patches, firewall protection, authentication, password complexity, encryption, and device
3498 lock or log out. During the Online Observation Process, the Auditor's device may be
3499 prevented from taking screenshots and from downloading or storing Test Taker recordings.
3500 It is considered best practice to periodically confirm compliance with these specifications.

3501
3502 11.6 There shall be no Test Taker data or Personal Information stored on the Auditor's device
3503 used for observing the Test after the Auditor review is completed.

3504
3505 11.7 The Auditor's work environment shall be suitable to focused work and free of any
3506 individuals who are not subject to a confidentiality agreement.

- 3507 ➤ Auditors work environment should be free of other individuals, quiet, and free of distractions.

3508
3509 11.8 The entity supplying the Auditors shall establish, implement, and maintain a process to
3510 monitor and audit Auditors for quality assurance and training purposes.

- 3511 ➤ Establishing a uniform process promotes consistency, and auditing those processes helps to
3512 confirm compliance. Auditing the work of Auditors can be undertaken on a periodic basis.

3513 help improve Auditor performance. Results may be, but are not required to be, provided to
3514 Test Sponsors.

3515
3516 11.9 Auditors shall be trained and required to, among other things, use the Online Observation
3517 Provider’s technology required for Test Session review, recognize and record Irregularities,
3518 understand specific data privacy and protection and security requirements of the Online
3519 Observation Provider and Test Sponsor, and appropriately handle and protect Test Taker
3520 Personal Information.

3521 ➤ Training should be provided on a regular basis to help promote consistent and high-quality
3522 performance by the Auditor. Training should include the importance of, and protocols for,
3523 protecting Test content and other intellectual property as well as Test Taker Personal
3524 Information. Training on the security of Test Taker Personal Information should occur on an
3525 annual basis. The entity providing the Auditors should keep a record of the training dates
3526 and a copy of the training.

3527
3528 11.10 The Auditor shall report any Irregularities based upon Test Sponsor and Online
3529 Observation Provider specifications.

3530 ➤ The process for recording and reporting irregularities should be documented. Auditors may
3531 be asked to review and record irregularities related to Test Taker authentication as well as
3532 Test Taker environments and behavior during the Test Session.

3533 ➤ In addition to providing human review of the recorded Test Session for purposes of reporting
3534 Irregularities, Auditors may also provide continuous learning feedback for Proctors to enable
3535 improvement of Proctoring services.

3536
3537

3538 Looking Ahead

3539
3540 **Change will remain constant**
3541 Academic research is beginning to be published concerning learnings from the COVID-19
3542 pandemic and how it affected the adoption, behavior, and outcomes of programs that shifted to
3543 blended formats or offered fully online delivery for the first time. This new information will
3544 continue to emerge. As a community that embraces learning, the assessment industry will
3545 continue to adjust and adapt.

3546
3547 **Device and Mobile Interaction**
3548 It is common for the average person to have multiple Wi-Fi capable devices in their possession,
3549 with smart phones being most predominant. Supporting the multitude of device types and
3550 operating systems at scale will continue to be a challenge for those on the delivery side.
3551 Consideration of how, when, and why a Test Taker’s mobile phone is involved in assessment will
3552 remain an ongoing discussion for the industry as technology continues to evolve.

3553

3554 User and Consumer Expectations around Convenience, Accessibility, and 3555 Accommodations

3556 Younger generations are fully digital natives and have increasing expectations around the user
3557 experience and convenience related to learning and assessment. These expectations will impact
3558 Test design, presentation, workflow, and customer support and should guide further
3559 technological development. This will enable the education and assessment communities to
3560 create meaningful and lasting value for Test Takers over the coming years. In addition, the
3561 education and assessment communities must continue to give attention to accessibility and
3562 accommodations to better serve the varied needs of Test Takers. These are critical to ensuring
3563 that all individuals have access to the benefits available through testing.

3564

3565 Humans vs. Machines

3566 As organizations seek efficiency, often that may involve the use of advanced computing and
3567 Processing of data by cloud service provides. The debate and investigation of when a machine is
3568 involved in Processing information, making determinations, or supporting decision making is
3569 likely to remain a topic of interest. Throughout this document, the concept of human intervention
3570 has been highlighted to emphasize the need for decisions affecting individuals not to be made
3571 solely by automated decision-making tools or AI.

3572

3573 Verification Advances

3574 There may be other widely accepted ways to verify and grant access to learning content or
3575 assessments in the future. While these Standards are comprehensive, the Co-Sponsors
3576 encourage the users of these Standards to consider that other secure and efficient ways to grant
3577 access and validate candidates may become more prevalent in the future.

3578

3579 How do we do this next time, and faster?

3580

3581 A significant effort was made in creating these Standards. It has been contributed to and
3582 reviewed by a global audience of experts over more than five years, and while it may be timeless
3583 in some sections, other sections will surely be outpaced by continued change. With that in mind,
3584 the NCTA and the ATP are looking ahead and expect to provide ways to make these Standards
3585 easier to update periodically. For example, these Standards will be available online first with print
3586 distribution following in hopes it can reach the widest audience possible without leaving out
3587 consumers that prefer to obtain a print copy. Placing it online will allow us to update and iterate
3588 faster in the future. After all, a significant reason this work is occurring is because of the rapid
3589 rate at which the consumption of education and measurement of knowledge is taking place
3590 virtually.

3591

3592

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3594 The following referenced documents are indispensable for the application of this set of
3595 standards. For dated references, only the edition cited applies.

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