



Identity Assurance Framework: Assessor Qualifications & Requirements

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Abstract

The Kantara Initiative Identity Assurance Work Group (IAWG) was formed to foster adoption of identity trust services. The primary deliverable of the IAWG is the Identity Assurance Framework (IAF), which is comprised of many different documents that detail the levels of assurance and the assurance and certification program that bring the Framework to the marketplace, among them the [Assurance Assessment Scheme \(AAS\)](#), which encompasses the associated assessment and certification program, as well as the [Service Assessment Criteria \(SAC\)](#), which establishes baseline criteria for general organizational conformity, identity proofing services, credential strength, and credential management services against which all CSPs will be evaluated. The present document provides an overview of the requirements which applicant assessors must fulfill in order to become Kantara-Accredited Assessors.

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71 **1 INTRODUCTION**

72 In order to have conformity to the Kantara Initiative IAF Service Assessment Criteria assessed
73 and determined by qualified and independent assessors, Kantara Initiative operates an
74 [Assurance Assessment Scheme \(AAS\)](#) which describes the process by which Assessors,
75 Service Approval Authorities (future work item), Service Providers, and Federation Operators
76 can show themselves to be fit to be granted use of the Kantara Initiative Mark, for their
77 specific services, all of which are orientated toward the provision and use of identity
78 credentials at recognized Assurance Levels and across a wide spectrum of public, private, and
79 individual sectors.

80 This document sets out the requirements which applicant assessors must fulfill in order to
81 become Kantara-Accredited Assessors. These requirements will be used to validate
82 applicants' suitability by the Assessment Review Board (ARB), according to the processes
83 described in the [Assurance Assessment Scheme](#).

84 2 GLOSSARY

85 The following terms are used specifically in this document, in addition to other terms from the
86 [IAF Glossary](#):

87 **Audit Organization** - an organization which undertakes audits or assessments of
88 entities and their services to establish their conformity to or compliance with specific
89 standards or other widely-recognized criteria. Specifically, in the context of the AAS,
90 entities providing credentialing or identity management services which are claiming
91 conformance to the IAF;

92 **(Accreditation) Applicant** - an **Audit Organization** applying to Kantara Initiative for
93 accreditation under the ACS;

94 **(Kantara-Accredited) Assessor** – an **Applicant** which has satisfied the requirements
95 of the AAS and to which accreditation has been granted;

96 **(Audit) Subject** - the organization submitting its nominated services to a **Kantara-**
97 **accredited Assessor** for audit and certification. *(Note – this usage of ‘Subject’ is*
98 *exclusive strictly to this document – readers should note that it has a different and very*
99 *specific meaning in other contexts, including within Kantara Initiative, e.g. in the PKI*
100 *and Identity Management domains, and is consequently defined otherwise in the IAF*
101 *Glossary, for wider use).*

102 **3 Assessor Qualifications & Requirements (AQR)**

103 **3.1 General Introduction**

104 Baseline Assessor Qualifications and Requirements (AQR) are those characteristics
105 which the [IAF Assurance Assessment Scheme](#) document requires of its assessors,
106 irrespective of whether they have prior recognition and qualification under any other
107 scheme, framework, or process acknowledged by the ARB, or are seeking *ab initio*
108 demonstration against the baseline characteristics.

109 **3.2 Baseline Assessor Qualifications & Experience**

110 The baseline characteristics selected for the Kantara Initiative Assurance Assessment
111 Scheme (AAS) are derived from the following sources:

112	[AICPA_ATT]	AICPA
113		“Attestation Standards”, yyyy-mm-dd
114	[AICPA_AUD]	AICPA
115		“Auditing Standards”, yyyy-mm-dd
116	[AICPA_CPC]	AICPA
117		“Code of Professional Conduct”, 1997-10-28
118	[AICPA_CPE]	AICPA
119		“Continuing Professional Education”, Revised 2001-12-31
120	[AICPA_QCS]	AICPA
121		“Quality Control Standards”, 2009-01-01
122	[FPKI FSC PAG]	Federal PKI Policy Authority, SAFE-BioPharma Policy
123		Authority and CertiPath Policy Management Authority
124		“PKI Audit Guidelines”, Draft v0-7
125	[IAF]	Kantara Initiative Identity Assurance Framework
126	[IRCA802]	IRCA/802/08/1
127		“Criteria for Certification as an Information Security Auditor”,
128		2008-02
129	[IS 17021]	ISO/IEC 17021:2006
130		“Conformity assessment - Requirements for bodies providing
131		audit and certification of management systems”
132	[IS 19011]	ISO/IEC 19011:2002
133		“Guidelines on Quality and/or Environmental Management
134		Systems Auditing”

135	[IS 27006]	ISO/IEC 27006:2007
136		“Information technology – Security - Requirements for bodies
137		providing audit and certification of information security
138		management systems”
139		(NB – IS 27006 mirrors IS 17021 but, where deemed necessary,
140		provides supplemental requirements explicitly for <i>information</i>
141		<i>security</i> management systems)
142	[ISACA_SGP]	“ISACA IS Standards, Guidelines and Procedures for Auditing
143		and Control Professionals”, 2008-10-15
144	[ISACA_CISA]	“ISACA Candidate’s Guide to the CISA Exam and Certification”,
145		2007 (no more-specific date)
146	[PCIQSA]	Payment Card Industry Security Standards Council
147		“Validation Requirements for <u>Qualified Security Assessors</u> ”
148		Version 1.1, 2006-09

149 The AAS has drawn on these sources to identify useful attributes which represent the
150 positive characteristics which Kantara Initiative requires of its accredited assessors,
151 whether by virtue of their prior qualifications or by the provision of explicit evidence
152 relating to specific requirements.

153 In order to be accredited by Kantara Initiative, Applicants must demonstrate that they
154 possess all of these characteristics by fulfilling the following requirements. The
155 following headings preface requirements which address:

- 156 1. The Audit Organization itself;
- 157 2. Individual Auditors;
- 158 3. The collective Audit Team;
- 159 4. Audit Domain-specific requirements.

160 Use of the above sources requires some qualification:

- 161 1. AICPA publications are generally directed at the accounting profession,
162 rather than information security, and hence specific qualification of any
163 clause having apparent relevance is required for the infosec domain. As a
164 clear example of this, refer to [AICPA_QCS] §10.45 as a very specific
165 case where it identifies the possible need for an IT professional to be
166 brought into the audit team to extend its capabilities, which in the case of
167 the ACS requirements is their fundamental scope, and moreover
168 specifically in the infosec domain. Because of this concern over
169 applicability any AICPA member organization will have to show how
170 their qualification relates to information security management.
- 171 2. IS 17021 is general in its requirements for bodies auditing and certifying
172 management systems in general. For application to the specific interests
173 of the AAS it must be supplemented by specific IT / information security

174 management systems capabilities – these are, at the ISO level, provided in
175 IS 27006 as requirements supplemental to those of IS 17021;

176 3. Whilst IS 19011 focuses on quality and/or environmental systems
177 auditing, its provisions are largely general in their expression and
178 therefore widely applicable, (see, e.g., IS 17021 §7.2.11), and even where
179 its clauses are explicitly in a quality and/or environmental context, it is the
180 intention that the standard can, in most instances, be readily interpreted in
181 (e.g.) an information (security) management system context. The
182 requirements of IS 19011 are therefore seen to be significantly relevant to
183 the AAS goals;

184 4. ISACA_SGP has been assessed only against the Standards, not the
185 Guidelines and Procedures, which underpin adherence to the Standards.
186 This is justified on the basis that the Standards are the prevailing authority,
187 in addition to which ISACA_CISA ensures that knowledge in reasonable
188 depth is determined.

189 It should be noted that the AAS neither strives nor claims to embody a rigorous
190 inclusion of all parts of the above references nor to be a proven mapping or
191 comparison between their respective requirements.

192 The following baseline requirements are to be considered as an holistic set, rather than
193 being individual and separate. Each requirement should therefore be considered to
194 apply in principal to all other requirement topics, e.g., where requirement AO.8
195 expresses expectations for competencies, such competencies must be shown to
196 address the implied needs of any other requirement area.

197 Note that the tags used for these requirements are deliberately distinct from the format
198 used to define SACs, to avoid any possibility of confusion between them.

199 References to the IAF are included so as to demonstrate that the provisions of that
200 version of the IAF have been taken into consideration when formulating the present
201 requirements (the AAS document of the IAF applies here).

202 **3.2.1 Audit Organization (AO) Requirements**

203 Applicant organizations must:

204 **AO.1 Established business status**

205 1) have a recognized legal status as a business entity operating in compliance with all
206 applicable requirements of the jurisdiction in which the business is principally
207 established and also in those jurisdictions in which it has a base(s) of operations.

208 **Guidance:** For reasons of confidence in the existence and durability of the Applicant, the
209 business has to be formally registered in some way as to there being no doubt that it is
210 entitled to purvey its services and that it has an operational background which gives

211 confidence that it has established practices and relevant experience, and all reasonable
212 expectation that it will continue to operate for the medium-term future (at least three years).

213 Also of significance is that where the Applicant offers services in more than one
214 jurisdiction (Country, State, Province, etc.) and has an established office in that jurisdiction
215 (rather than providing a trans-border service) which it requires the Accreditation to cover,
216 the same requirements apply to such additional jurisdiction.

217 Representative evidence would typically be verifiable copies of, or links to, licenses and/or
218 business registrations, etc.

219 2) be in good standing with a level of liability protection set according to a risk-based
220 determination, accounting for the scale of the business and the jurisdictions in which
221 operations are conducted.

222 **Guidance:** To provide protection for the Subject organizations which it will assess,
223 liability protection is necessary. Potential liabilities may be covered by business insurance
224 or other instruments, e.g. reserves. Representative evidence would be such policies or
225 proof of secured (i.e. fire-walled from application for any other purposes) reserves.

226 3) have effective documented management and approval structures.

227 **Guidance:** Possession and demonstrated application of a documented management
228 structure with clear ownership and approval responsibilities is the most effective way to
229 assess whether the organization is set up to manage and perform assessments in the way
230 required (e.g. with integrity and independence) by other criteria in this set. Representative
231 evidence would therefore be the defined processes and records of their implementation.

232 **AO.2 Independence & impartiality**

233 1) produce a documented commitment to maintaining its impartiality and independence
234 from any of the potential providers of services within the Kantara Initiative community,
235 and with other CSPs in other Federations with which Kantara Initiative may established
236 agreements of any kind.

237 **Guidance:** The primary requirement is to show the senior management's commitment to
238 allowing no ownership, shareholding, or conflicting contractual or like bindings between the
239 Applicant and those whom it may assess, or with those parties which may have an interest
240 in the outcome of any assessment, e.g. competitors of the Subject. A formal declaration is
241 at the least a basis for addressing any lack of independence should it arise, although the
242 ARB may seek further assurances where any potential conflicts of interest are known to
243 them, in fact or as possibilities. Note that this requirement focuses on specific parties with
244 which the Kantara Initiative community has relationships and because of this specific focus
245 would generally be provided as a specific statement in support of the application.
246 Representative evidence would be a published statement.

247 2) acts at all times so as to preserve its impartiality.

248 **Guidance:** Whilst a declaration of impartiality is an important public statement, the
249 practices to effect that impartiality must exist and be implemented. This requirement is that
250 such practices be in place and continuously exercised. Potential threats to impartiality relate
251 to organizational conflicts as well as those arising from other services which may have been
252 offered to the Subject or personal interests or participation of individuals. Representative
253 evidence would be records of instances where the Applicant has had to exhibit its
254 impartiality (potentially in addressing a complaint or appeal, e.g.).

255 3) produce documented practices to review threats to impartiality in any assignment, at all
256 stages of its conduct.

257 **Guidance:** Ensure that the Applicant undertakes an assessment of the risks, with regard to
258 its impartiality undertakings, involved with each assessment it is engaged to perform, and
259 that there is a review of that risk over the duration of the assignment. As a minimum, an
260 initial assessment and one immediately prior to issuing a report would be expected, although
261 others may be included where the assignment is extended or there are other obvious reasons
262 to do so, such as a change of ownership or significant re-organization (of either party).
263 ‘Practices’ include documented record of the application of such practice, and the ARB may
264 require evidence to be provided, as it may for any criterion. This requirement essentially
265 underpins sub-requirement (3) of this clause. Representative evidence would be the
266 required documentation.

267 **AO.3 Management responsibility & liability**

268 1) show management commitment to adherence to best governance practices supported by
269 having documented policies and procedures which ensure adherence to professional
270 standards and practices and in particular to the auditing standards and processes under
271 which it operates.

272 **Guidance:** Notwithstanding the clear need for the practitioners actually undertaking the
273 assessments to have requisite skills (addressed in subsequent requirements) it is important
274 that the Applicant organization actually demonstrates that it is set up for and capable of
275 employing best management practices as required. Representative evidence would therefore
276 be identification as to how the Applicant’s practices fulfill this requirement and identify the
277 audit and technical standards and/or other references on which its operations are based.

278 **AO.4 Openness / Defined audit process**

279 1) faithfully document and publish the audit process(es) it applies, describing the technical
280 procedures, accounting for principles such as impartiality, objectivity and
281 confidentiality, any applicable reference standards, and its contractual arrangements
282 with its clients.

283 **Guidance:** Kantara Initiative seeks a consistency in the application of assessments leading
284 to certification of Kantara-recognized Service Providers and therefore requires that Kantara-
285 Accredited Assessors have in place a documented and well-defined process for engaging

286 with clients and performing their assessments which can be repeated and in an ideal world
287 would yield consistent results for the same Subject service. Representative evidence would
288 be the documentation defining the process and records of its implementation.

289 **AO.5 Confidentiality**

290 1) have in place procedures which ensure that proprietary information relating to clients is
291 securely stored and controlled in all aspects of its use.

292 **Guidance:** Many Subjects will be vying for business from Kantara Initiative members and
293 other participants in the wider community, and as a result assessors will potentially be
294 exposed to proprietary information relating to one or more of another service provider's
295 competitors. As representative evidence, Applicants must show that they have in place
296 procedures which will safeguard their clients' confidentiality in all respects.

297 **AO.6 Responsiveness to complaints**

298 1) have a means by which clients may lodge appeals or complaints concerning their
299 practices and determinations and have a documented process for objectively addressing
300 those complaints.

301 **Guidance:** The Applicant should have the means to receive, process, and respond fairly to
302 any complaints or appeals arising from the conduct of its assessment services, since an
303 objective audit process may be a cause for contention where findings are concerned.
304 Having in place the means to address and resolve any such issues contributes to the overall
305 assurance from the accreditation process. Representative evidence would be the
306 documented process and samples of its implementation where there are any.

307 **AO.7 Resources**

308 1) have qualified and competent personnel to manage the organization and to perform the
309 audits.

310 **Guidance:** Provision of documentary evidence of the organization's conformity to
311 preceding criteria is not, of itself, sufficient – the AAS also requires that the Applicant
312 shows that it has personnel with the requisite competencies and qualifications necessary to
313 effectively apply the organization's policies, procedures, etc. A register of roles, related job
314 descriptions, and current employee names for the positions having specific relevance would
315 fulfill this requirement.

316 2) have documented processes to ensure that audit and support personnel have and
317 maintain the competencies necessary to fulfill their duties according to the systems
318 being assessed, their complexity and their geographic location(s).

319 **Guidance:** Provision of documentary evidence of the organization's conformity to
320 preceding criteria is not, of itself, sufficient – Kantara Initiative also requires that the

321 Applicant shows that it has personnel with the requisite competencies and qualifications
322 necessary to effectively apply the organization's policies, procedures, etc. A register of
323 roles, related job descriptions, and current employee names for the positions having specific
324 relevance would fulfill this requirement.

325 **AO.8 Technical competence**

326 1) have an operating record of a minimum accumulation of three person months of
327 provision of audit services over an elapsed period of 12 months OR, if unable to fulfill
328 either requirement, having staff who can demonstrate these minima in their professional
329 experience immediately prior to establishing/joining the Applicant organization.

330 **Guidance:** Apart from having appropriate competencies, actual experience in their
331 application is required to be shown. This is intended to ensure that the Applicant,
332 organizationally, is active in the auditing arena. Provision is made to 'grandfather'
333 experience from specific staff members when they are able to demonstrate their currency
334 and are assuming an active role within an organization which might otherwise not meet the
335 AAS requirement. Representative evidence would be illustration of past assignments, in
336 terms of scope, date, and resources applied, including which specific personnel participated.

337 **3.2.2 Auditor Qualification (AQ) Requirements**

338 Although the AAS does not accredit individuals, the organization must commit to ensuring that
339 the assessors it uses fulfill the following requirements and that it has in place the means to
340 ensure that these requirements are fulfilled. Applicant organizations must ensure that their
341 individual Auditors:

342 **AQ.1 Personal attributes**

343 1) exhibit ethical standards by performing audits in an honest, fair, objective, and discreet
344 manner and with due diligence and professional care, with neither record of
345 professional mal-practice nor of criminal conviction such as to bring into doubt their
346 ability to so perform the audit.

347 **Guidance:** Ethical standing is required of all personnel involved in the oversight,
348 management, performance, review, and granting of certification relating to any audit
349 process. Ethics require the auditor to be fair, truthful, and honest in their dealings with the
350 audit client, in their assessment of only factual matters, and in their overall performance of
351 the audit. This requires strict adherence to professional and technical standards as well as
352 having a balanced personal nature. Whilst some infractions of the law might be identified
353 they may equally be considered to be inconsequential in the context of the performance of
354 the required assessments. On the other hand, convictions such as fraud, embezzlement,
355 other acts of moral turpitude, bankruptcy, would be serious concerns, in the event of which
356 judgment would have to be made as to the risk that may be presented to the good standing
357 of the AAS as a whole should the Applicant be granted Accreditation. On-going
358 investigations or existing allegations may also require careful consideration by the ARB.

359 Factors in such determinations might be the role of any affected individuals within the
360 Applicant organization. The greater the authority and influence of anyone having any
361 unfavorable record should be balanced against the severity and nature of their (possibly
362 alleged) offense when deciding whether to recognize them or not. Required evidence could
363 be an employee-screening process operated by the organization, records of application of
364 that process including background checks, questionnaires, etc.

365 Note that this requirement does not assess experience and knowledge in the specific auditing
366 field – see AQ.3.

367 **AQ.2 Technical competence**

368 1) have and maintain the requisite knowledge, training, and experience of applicable
369 generic audit standards and those specifically addressing information security
370 governance and management, risk assessment, information technology, and related
371 security controls.

372 **Guidance:** In addition to overall technical competence across the organization, individual
373 technical competence must be shown for individual auditors. Required evidence would be
374 identification of the specific training undertaken, of standards and other references about
375 which the individuals have knowledge, and of particular techniques applied.

376 2) have the requisite knowledge, training and experience of applicable laws, regulations
377 and other such requirements.

378 **Guidance:** A comprehensive assessment must investigate the regulatory aspects of the
379 subject and hence, in addition to technical skills, assessors must have knowledge of
380 applicable legislation, etc. Required evidence would be identification of such laws, etc., and
381 where the assessor purveys their work in more than one jurisdiction, indication of the
382 differing requirements across jurisdictions.

383 **AQ.3 Subject Matter-specific competence**

384 1) be knowledgeable about, trained, and current in the specific management, operational,
385 and technical aspects of the «*specific domain & technology*» in which the audit is
386 performed (see note below), including accepted practices, and applicable standards and
387 specifications.

388 **Note:** For the purposes of being deemed qualified to perform assessments of CSPs claiming
389 conformity to the Kantara Initiative IAF Service Assessment Criteria, the requirements for
390 «*specific domain & technology*» shall be fulfilled by conformity to the requirements set
391 forth herein under group ‘AD’.

392 Where other organizations and federations wish to use Kantara-accredited assessor
393 organizations for assessments performed in their own «*specific domain & technology*» (e.g.
394 PCI DSS, Federal PKI, ...) they should state their own criteria to be used in lieu of (or in
395 addition to, according to their chosen scoping) those in group ‘AD’ herein when fulfilling

396 this AAS requirement and take their own measures to determine the Applicant's conformity
397 to those specific needs.

398 **Guidance:** Subject-specific knowledge and experience is required to enable the effective
399 application of the generic audit competencies to the specific subject area. Since the Kantara
400 Initiative Assurance Assessment Scheme is, but for this particular requirement, generic and
401 agnostic in its choice of baseline characteristics such that it can be adopted for other uses or
402 assessors accredited against it can be used in other domains where the only additional
403 requirement is the domain-specific knowledge, this present requirement can be either
404 substituted for by an alternative domain's set of specific requirements or extended with
405 other such requirements where the two specific areas are both necessary.

406 **AQ.4 Education / Professional qualification/certification**

407 1) have received at least a secondary education (and would preferably hold a bachelor's
408 degree in any subject) plus any one (at least) of the following professional technical
409 IT/information security management qualifications, which must be current: CGEIT,
410 CISA, CISSP, CISM, CITP, IRCA for ISMS/ITSM, PCI QSA, or proven equivalent
411 qualification or experience.

412 **Guidance:** Current professional qualifications are the more important part of this
413 requirement, underpinning the basic training qualifications – although a secondary
414 education is the minimum acceptable, a bachelor's degree is the preferred baseline
415 educational experience and those without it may have to show stronger work experience to
416 be acceptable. Holding one of these professional qualifications gives confidence in the
417 underlying knowledge of the assessor, which may be broader than some specific experience
418 has allowed. Required evidence would typically be certified copies of award of
419 qualification or a URL to a professional body's registry, which can be authenticated.

420 **AQ.5 Impartiality & Professional Competence**

421 1) have no connection to the client, the material subject to the audit, or any relevant parties
422 other than in their professional auditing capacity, nor be of a disposition vulnerable to
423 coercion.

424 **Guidance:** Although preceding requirements require independence and impartiality on the
425 part of the organization, its audit staff must also exhibit these qualities and be qualified to
426 perform the audit. Past professional experience and assignments will be one way to make
427 an assessment of their impartiality, e.g. ensuring that the auditee organization was not a
428 previous employer of the auditor, or the auditor a previous employer of any of the auditee's
429 staff, or that the auditor had not previously given consultancy to the auditee organization,
430 preferably in any form whatsoever, or otherwise demonstrably in a manner which could not
431 have any relationship to the material which the audit will address. Inter-personal
432 relationships might also color judgment but will be harder to identify without the
433 cooperation of the auditor. Even harder to assess, unless there is a pattern of auditee's
434 complaints about the fairness of an auditor, is the intellectual objectivity, truthfulness, and
435 impartiality which are the scope of professional competence in this context.

436 Forms of evidence could be the individual auditor's assertions or the applicant
437 organization's processes and records for reviewing previous employment or customer
438 complaints.

439 **AQ.6 Experience**

440 1) have participated for a minimum of 20 days of audit services, of which 10 days must
441 have been on-site, over an elapsed period of 36 months.

442 **Guidance:** This requirement accommodates 'desk auditing', i.e. review of documents from
443 the auditor's own offices, but also requires on-site auditing experience, since this is the most
444 demanding, challenging, and also effective experience. Verifiable personal or
445 organizational records of assignments undertaken would generally satisfy this need.

446 **3.2.3 Audit Team (AT) Requirements**

447 Auditor Teams must:

448 **AT.1 Collective skills**

449 1) consist of professionals who collectively have the necessary skills and experience to
450 assess the policies, procedures, and practices of the subject in all general and specific
451 respects; a single auditor is acceptable but must meet the requirements for Lead Auditor
452 (below).

453 **Guidance:** Although an audit team may actually be a single person, the nature of the audit
454 subject may require a range of differing expertise which can only be effectively fulfilled by
455 a team of complementary individuals. A process for determining the skill requirements for
456 any particular audit and selecting suitably skilled audit staff, supported where required by
457 evidence of past assignments and the selected team's skills would typically be the form of
458 required evidence.

459 **AT.2 Leader Auditor's skills**

460 1) be led by an individual who has participated as a Team Leader (including supervised in
461 that capacity) for a minimum of 15 days of audit services, of which 10 days must have
462 been on-site, over an elapsed period of 24 months.

463 **Guidance:** This simply requires that the Lead Auditor has either received training in this
464 role or has performed it as a qualified Leader within a reasonable period of time and at a
465 reasonable level of effort. Staff records should be the most practical form of evidence to
466 support conformity to this requirement.

467 2) be led by an individual who has a knowledge of all areas which are addressed by the
468 audit, although other team members may have specialist roles.

469 **Guidance:** The selected Lead Auditor’s curriculum vitae, or similar evidence of past
470 experience and training, should demonstrate that they have the requisite skills, at least at a
471 level where, supported by specialist advice, they can make informed and balanced decisions.

472 3) be capable of planning an audit with such a scope.

473 **Guidance:** The Applicant is expected to demonstrate by past performance, available
474 resource, and tactical capability that they are able to plan and execute an audit of the form
475 required to satisfy Kantara Initiative expectations. Record of past performance would be an
476 obvious way to evidence conformity to this requirement.

477 **AT.3 Use of SMEs**

478 1) where necessary, only use Subject Matter Experts which exhibit the same degree of
479 impartiality and competence in their specific field as do the auditors in theirs. SMEs
480 may advise the Lead Auditor but may not dictate findings, recommendations, or
481 remedial actions.

482 **Guidance:** SMEs may be either internal or external, although in the latter case the ARB
483 would expect to see that the organization had in place the means to ensure that the SME,
484 organizationally and individually, would not impinge upon the applicant organization’s
485 ability (once accredited) to fulfill the AAS requirements. Evidence of a process for
486 validating and selecting SMEs, possibly supported by records of the application of that
487 process, would be appropriate evidence.

488 **3.2.4 Audit Domain (AD) Requirements (i.e. «specific domain & 489 technology»)**

490 Auditors assessing Subjects which are Credential Service Providers must be highly
491 knowledgeable about:

492 **AD.1 Applicable credential and identity management standards**

493 1) current and evolving international standards
494 DIS 27046,
495 DIS 29115 (a.k.a. ITU-T x.eaa¹).

496 **Guidance:** Whether it is the above-cited standards or others which over time may be added
497 or used to replace those here-cited, applicants should show as evidence against this
498 requirement any or a combination of: a training program for its auditors which imparts
499 knowledge and understanding of these standards; previous performance of audits where

¹ A standard published by ITU-T would be a sector-specific standard. Although this document may evolve through the same channel as Draft International Standard 29115, and have no material differences, this clause is retained to accommodate potential future sector-specific criteria, and if ITU-T x.eaa and DIS 29115 do evolve as a common standard then conformity to this requirement (at least in the context of this specific standard) will suffice to show conformity to the following requirement

500 knowledge and understanding of the standards was applied, or; direct participation as an
501 author / editor / expert contributor to development of the standard(s).

502 2) current and evolving sector-specific standards
503 Draft ITU-T x.eaa.

504 **Guidance:** Evidential requirements and principles are as stated for AD.1(1) above.

505 3) national/regional standards:
506 - Federal Credential Assessment Framework Credential Assessment Profiles,
507 - NIST Federal Information Processing Standard 201, NIST Special Publication
508 800-63,
509 - Federal Identity Credentialing Committee “*Criteria for Assessing FIPS 201*
510 *Compliance of PIV Applicant Registration and Card Issuance Services*”, v2.Z .

511 **Guidance:** Evidential requirements and principles are as stated for AD.1(1) above.

512 4) IAF Service Assessment Criteria (Common Organizational, Identity Proofing,
513 Credential Management).

514 **Guidance:** Evidential requirements and principles are as stated for AD.1(1) above.

515 **AD.2 Technical knowledge**

516 1) the credential management subject area, across the entire life-cycle and encompassing
517 management and technical matters, the definition and implications of the specified
518 Assurance Levels, and knowledge of the various technologies employed.

519 **Guidance:** Evidential requirements and principles are as stated for AD.1(1) above.

520 **3.3 Recognition of prior qualification**

521 The AAS is based upon the principle that it shall impose the minimum additional effort upon
522 Applicants, and Kantara Initiative itself, commensurate with sufficient confidence being
523 established in the Applicants’ conformity to all of the requirements know collectively as the
524 ‘baseline characteristics’. Through the ‘grandfathering’ principle maximum recognition is
525 given to Applicants who can demonstrate their qualification against certain recognized industry
526 references, these being:

527 [AICPA_ATT] AICPA
528 “*Attestation Standards*”, yyyy-mm-dd

529 [AICPA_AUD] AICPA
530 “*Auditing Standards*”, yyyy-mm-dd

531	[AICPA_CPC]	AICPA
532		“Code of Professional Conduct”, 1997-10-28
533	[AICPA_CPE]	AICPA
534		“Continuing Professional Education”, Revised 2001-12-31
535	[AICPA_QCS]	AICPA
536		“Quality Control Standards”, 2009-01-01
537	[FPKI FSC PAG]	Federal PKI Policy Authority, SAFE-BioPharma Policy
538		Authority and CertiPath Policy Management Authority
539		“PKI Audit Guidelines”, Draft v0-7
540	[IAF]	Kantara Initiative Identity Assurance Framework, v2.0
541		(specifically the Assurance Assessment Scheme)
542	[IRCA802]	IRCA/802/08/1
543		“Criteria for Certification as an Information Security Auditor”,
544		2008-02
545	[IS 17021]	ISO/IEC 17021:2006
546		“Conformity assessment - Requirements for bodies providing
547		audit and certification of management systems”
548	[IS 19011]	ISO/IEC 19011:2002
549		“Guidelines on Quality and/or Environmental Management
550		Systems Auditing”
551	[IS 27006]	ISO/IEC 27006:2007
552		“Information technology – Security - Requirements for bodies
553		providing audit and certification of information security
554		management systems”
555		(NB – IS 27006 mirrors IS 17021 but, where deemed necessary,
556		provides supplemental requirements explicitly for information
557		security management systems)
558	[ISACA_SGP]	“ISACA IS Standards, Guidelines and Procedures for Auditing
559		and Control Professionals”, 2008-10-15
560	[ISACA_CISA]	“ISACA Candidate’s Guide to the CISA Exam and Certification”,
561		2007 (no more-specific date)
562	[PCIQSA]	Payment Card Industry Security Standards Council
563		“Validation Requirements for Qualified Security Assessors”
564		Version 1.1, 2006-09

565 By their very nature, these references provide ‘credit’ against different groups of the AAS
566 requirements, and Applicants may use collective credits from multiple prior qualifications.

567 The ARB will, where the published credit allowed is 'qualified' or 'none', allow credit where
568 the Applicant can demonstrate that specific AAS requirements were in fact addressed by the
569 particular prior qualification they are presenting. This recognizes that the determination made
570 in this document is based upon a generic interpretation of the applicable reference, rather than
571 a specific instance of it.

572 The continued validity of the credit granted to Applicants with certified (or otherwise proven)
573 conformity to the requirements of each reference shall be reviewed and revised accordingly
574 whenever the relevant reference source is revised.

575 **3.3.1 Assessor Qualifications & Experience (AQE) matrix**

576 The AQE matrix in Table 1 provides a color-coded quick-look reference for each of the
577 recognized sources of pre-qualification which will allow Applicants with multiple forms of
578 pre-qualification, and the ARB, to determine the AAS requirements where the Applicant must
579 provide specific evidential inputs rather than have their conformity 'grandfathered' on account
580 of credit given for their pre-qualification status.

581 Where there may be two or more clauses from the same reference source applicable for any
582 given AAS requirement which do not have the same 'credit' determination the least favorable
583 determination is given (things can only get better from thereon). Such instances are marked '†'
584 in the matrix (e.g. 'Qualified †').

585 **3.3.2 Minimum Criteria**

586 These criteria establish minima: Applicants who seek credit on the basis of prior qualification
587 under other schemes acceptable to Kantara Initiative shall be expected to be in full compliance
588 with the most demanding of the combined criteria, at all times during which they seek the
589 benefit of any prior qualification(s).

590 **3.3.3 Validity**

591 Where an Applicant's accreditation is based on prior qualification the accreditation will lapse
592 six months after the first-occurring expiration date of any claimed prior qualifications, at any
593 given point during the first two-and-a-half years of the three year accreditation validity.
594 Kantara Initiative considers that a six-month window offers the Applicant sufficient latitude in
595 renewing the applicable qualification(s) or offering supplemental evidence of conformity
596 should they choose to no longer rely upon that prior qualification for the applicable AAS
597 requirements.

598 **3.3.4 Waivers**

599 Applicants with reasonable grounds for doing so may request that a waiver be granted where
600 the AAS requirements are not strictly met but the Applicant requests a 'conformity exception –
601 CE' and offers sufficient evidence to convince the ARB that their specific qualifications or
602 evidence are equally acceptable. For example, special experience may have been acquired and
603 used to gain a professional qualification in lieu of conventional requirements, in which case,

604 assuming that the qualification was one recognized by the ARB, the same argument would
605 most likely be accepted as fulfillment of the AAS' requirement for relevant experience.

606 Kantara Initiative reserves the right, at the sole determination of the ARB, to decline requests
607 for waivers, grant waivers on a one-off basis and for whatever time period it deems fit, or to
608 undertake revision of the AAS requirements to include the circumstances of the request as a
609 permanent part of the AAS (see below).

610 **3.3.5 Revisions to baseline AQE**

611 Kantara Initiative reserves the right, subject to due notice and consultation, to revise these
612 criteria as it sees fit, including the addition of requirements in response to any CE requests
613 which suggest that such evidence is justifiable and likely to be sufficiently commonplace or
614 valuable to the overall accreditation process to deserve recognition through revision to
615 requirement.

616 **Table 3-1** Assessor Qualifications & Experience ‘credit’ reference matrix

ACS Rqt		AICPA	IRCA	ISO 19011	ISO 17021	ISO 27006	ISACA	PCI SSC
AO.1	1)	Qualified	None	None	Qualified	Qualified	None	Qualified
	2)	None	None	None	Unqualified	Unqualified	None	None †
	3)	None	None	None	Unqualified	Unqualified	None	None †
AO.2	1)	None	None	None	Qualified	Qualified	Qualified	Qualified
	2)	Qualified	None	None	Qualified	Qualified	Unqualified	Qualified
	3)	None	None	None	Unqualified	Unqualified	Qualified	Qualified
AO.3	1)	Qualified	None	None	Unqualified	Unqualified	None	None
AO.4	1)	Qualified	None	Qualified	Unqualified	Unqualified	Qualified	None
AO.5	1)	Qualified	None	None	Unqualified	Unqualified	None	Unqualified
AO.6	1)	Qualified	None	None	Unqualified	Unqualified	None	None
AO.7	1)	Qualified	None	Qualified	Unqualified	Unqualified	Qualified	Qualified
	2)	Qualified	None	Qualified	Unqualified	Unqualified	None †	None
AO.8	1)	None	None	Qualified	None	Qualified	None	Qualified
AQ.1	1)	Qualified	None	Qualified	None	None	Qualified	Qualified
AQ.2	1)	Qualified	Unqualified	Unqualified	Unqualified	Unqualified	Unqualified	Qualified
	2)	Qualified	None	Unqualified	None	Unqualified	None	None
AQ.3	1)	None (defers to AD group)						
AQ.4	1)	None	Unqualified	Qualified	None	Unqualified	None	None
AQ.5	1)	Qualified	None	Qualified	Unqualified	Unqualified	Unqualified	None
AQ.6	1)	None	Unqualified	None	None	Unqualified	None	None
AT.1	1)	Qualified	None	Unqualified	Unqualified	Unqualified	None	None
AT.2	1)	None	Unqualified	Unqualified	Unqualified	Unqualified	None	None
	2)	Qualified	Unqualified	Unqualified	Unqualified	Unqualified	None	None
	3)	Qualified	Unqualified	Unqualified	Unqualified	Unqualified	Qualified †	None
AT.3	1)	Qualified	None	Unqualified	Unqualified	Unqualified	Unqualified	None
AD.1	1) - 4)	None (Non-IAF frameworks may specify their own domain-specific requirements for which different credit may be determined in recognition of prior qualification)						
AD.2	1)							

617

618 **3.4 Compliance Table**

619 Use the following table to correlate criteria and the evidence offered to support compliance.

620 Assessors preparing an application can use the table to correlate evidence with criteria or to justify non-applicability based upon their prior
621 qualification or other factors they believe to be valid.

622 The ARB may use the table to record the steps in its assessment and its determination of compliance or of any non-compliances.

623 **Table 3-2** AQR Compliance

Clause	Description	Compliance
Audit Organization (AO) Requirements		
AO.1	Established business status	
AO.2	Independence & impartiality	
AO.3	Management responsibility & liability	
AO.4	Openness / Defined audit process	
AO.5	Confidentiality	
AO.6	Responsiveness to complaints	
AO.7	Resources	
AO.8	Technical competence	
Auditor Qualification (AQ) Requirements		
AQ.1	Personal attributes	
AQ.2	Technical competence	
AQ.3	Subject Matter-specific competence	
AQ.4	Education / Professional qualification/certification	
AQ.5	Impartiality & Professional Competence	
AQ.6	Experience	
Audit Team (AT) Requirements		

AT.1	Collective skills	
AT.2	Leader Auditor's skills	
AT.3	Use of SMEs	
Audit Domain (AD) Requirements		
AD.1	Applicable credential and identity management standards	
AD.2	Technical knowledge	

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