

Selecting a language proficiency test to meet ICAO LPR

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General considerations

- Each test can be used only for the purpose for which it was designed and validated.
- Testing language proficiency according to the ICAO scale requires development of specific purpose language proficiency tests.
- Test content has to be based on a needs analysis.



Providing information about tests

- Test developers have to provide comprehensive information about their test.
- Test developers have to publish a sample test which is fully representative of the real test.
- Tests with incomplete documentation or tests which cannot be evaluated thoroughly should be excluded from the selection process immediately.



Test purpose

- Require information about the following:
 - Targeted test population
 - What the test is supposed to measure
 - How it should be used
 - How and for whom the test should not be used



Test development

- Require information about the following:
 - Test development team expertise
 - Item / task development process, trialling, subsequent analyses and actions taken
 - To what extent the test versions are parallel.



Reliability

- Defined as a consistency of measurement.
- Usually reported in the form of a reliability coefficient (ranging from 0.0 to 1.0).
- Look for reliability coefficients as close to 1.0 as possible.
- Speaking tests
 - Intra-rater reliability
 - Inter-rater reliability



Reliability – common problems

Attention!

Reliability is only one test characteristic. A perfectly reliable test does not necessarily have to be valid. A test can be consistent in the measurement but may measure something other than intended!



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Validity

- A test is valid when it measures what it is supposed to measure.
- Validity pertains to the correctness of the inferences made on the basis of test scores.
- Each test can be valid only for the purpose for which it was designed.



Validity – questions to ask

- Request evidence that:
 - the test was trialled on a representative sample of the target population and that the sample was big enough to generalise from.
 - a thorough needs analysis had been conducted and test content reflects the job-related context.
- Ask how item / tasks difficulty levels were established and cut-off scores set.



Validity – common problems

- Construct under-representation

Test omits one or more important aspects of the content domain.

- Construct irrelevance

Test contains items or tasks which test something else than what the test is supposed to measure.



Fairness

- Each test has to be fair to all candidates regardless of their gender, language background, race, ATC rating, aircraft type rating, etc.
- Request evidence that the test was trialled on a representative sample of the target language population and bias analyses confirmed that the test does not disadvantage a particular group of candidates.



Test administration

- Resources (human, material, time) have to be specified by the test developers.
- Comprehensive and clear guidelines for everybody involved in test administration (including candidates) have to be provided.
- Request evidence that the test was trialled and validated for the same conditions as intended for live test administration.



Sustainability

- Require information on:
 - How the test will be sustained.
 - How new test versions will be developed and trialled.
 - How the test developers want to ensure that all test versions are parallel.
 - How the testing standards (administration, interlocuting, assessing...) will be monitored and maintained.



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Conclusion

- Language testing in aviation is of very high stakes.
- Evaluate each test package thoroughly and make every effort to ensure that a valid and reliable test is selected.
- Unreliable and invalid tests compromise safety in aviation.



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