

Algorithmic Fairness Audit Report

Six Points for a Verifiable Fairness Test Protocol for Underwriting and Scoring Models



Fairness can be measured on an existing underwriting or scoring model in just a few days. However, the result only becomes verifiable through the documentation of the decisions that precede the measurement. The following six points represent the minimum scope—they do not replace model validation but rather supplement it with a dimension for which it was not designed.

1

Protective Characteristics and Comparison Groups

Which characteristics are examined, how the comparison groups are defined, and on what legal basis the necessary special categories of personal data are processed—including the safeguards required under Article 10(5) of the AI Regulation.

☐ *Is it documented why exactly these characteristics were examined—and why others were not?*

2

Key metric and supporting metrics

A defined lead metric for each use case, with justification for the choice and an explicit reference to the fact that independence, equal error rates, and calibration cannot be satisfied simultaneously when base rates are unequal.

☐ *Is there a justification for which definition of fairness applies here—and who made that decision?*

3

Thresholds and tolerance bands

Threshold values for each metric with a technical derivation, defined prior to measurement. Thresholds set retrospectively are not a test result, but rather a description of the findings.

☐ *Were the threshold values established before the first measurement?*

4

Proxy and Counterfactual Analysis

An assessment of how well a protected characteristic can be reconstructed from the remaining model characteristics, supplemented by a counterfactual case-by-case review—including both the tested and rejected candidates, not just the outliers.

☐ *Are the rejected candidates also documented?*

5

Technical Justification for Remaining Differences

Actuarial or credit-related derivation of each remaining group difference, clearly separated from the statistical finding.

☐ *Does the justification hold up even without the note that the difference is statistically substantiated?*

6

Repetition Cycle and Escalation Path

Integration with existing model validation and post-market monitoring (Art. 72 AI Regulation): designated responsibility, defined escalation path, and documented library version to ensure that repeat measurements remain reproducible.

☐ *Who will notice if the model goes out of tolerance in eighteen months?*

Legal framework: Art. 10(2)(f) and (g) and Art. 10(5) of Regulation (EU) 2024/1689 (AI Regulation); Post-market monitoring pursuant to Art. 72. For systems listed in Annex III—including creditworthiness assessments as well as risk assessment and pricing in life and health insurance—the high-risk obligations apply as of December 2, 2027.

This document is intended for technical guidance and does not constitute legal advice. It may be shared internally without modification, provided the source is cited.

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