

SUMPROOF PAY
Gender Pay Gap Report — Article 9 Report Pack
Directive (EU) 2023/970, Article 9(1)(a)–(g) · Reporting year 2026
SAMPLE REPORT — SYNTHETIC DATA — NOT FOR SUBMISSION

Employer Musterfirma GmbH (fictional; 900 employees, 4 worker categories)
Prepared 17 July 2026 · Clouthier Simulation Labs · <https://simgen.dev/sumproof/pay/>
Artifact sha256:10ac7cab2b33c60a... (canonical bytes; Ed25519-signed in the full pack)

1 Required statistics — Article 9(1)

Statistic		Value
(a)	Mean gender pay gap (all pay)	+21.07 %
(b)	Mean gap in complementary / variable components	+12.98 %
(c)	Median gender pay gap (all pay)	+22.59 %
(d)	Median gap in complementary / variable components	+12.15 %
(e)	Workers receiving complementary / variable pay	women 58 % · men 69 %

Sign convention: positive = men paid more. Gap = $(\bar{p}_M - \bar{p}_F) / \bar{p}_M$ per Article 3(1)(e).

(f) Gender distribution by pay quartile

	Lower	Lower middle	Upper middle	Top
Women	69.8 %	42.2 %	43.1 %	27.1 %
Men	30.2 %	57.8 %	56.9 %	72.9 %

Women are concentrated in the lowest pay quartile (69.8 %) and under-represented in the top quartile (27.1 %) — the composition effect that drives most of the headline gap.

(g) Pay gap by category of workers (Article 4 equal-value categories)

Category	n	Basic-pay mean gap	Variable-pay mean gap
Admin	225	+4.55 %	+3.1 %
Engineering	225	+6.45 %	+8.2 %
Operations	225	+9.57 %	+6.9 %
Sales	225	+7.92 %	+11.4 %

2 Article 10 assessment triggers

Three categories exceed the 5 % threshold: Engineering (+6.45 %), Operations (+9.57 %), Sales (+7.92 %). Under Article 10, if a gap of at least 5 % in any category of workers cannot be justified by objective, gender-neutral criteria and is not remedied within six months of this report, a joint pay assessment with workers’ representatives becomes mandatory. Recommended action: document objective justification per category now, or begin remediation planning.

3 Verification — how anyone checks this report

This report is not a claim to be trusted; it is a computation to be checked.

1. The full pack includes `article9.artifact.json` — a canonical, byte-stable encoding of every statistic above, hashed (SHA-256) and signed (Ed25519) by the preparer.
2. The standalone verifier (a single Python file, no network access) recomputes the artifact hash and checks the signature on any machine: `python verify_article9.py article9.artifact.json`.
3. Workers’ representatives receive the verifier and the artifact directly. Article 9(6) requires management to confirm the report’s accuracy in consultation with them — with this pack, that confirmation is a verification they run themselves, not a statement they accept.
4. In the full pack the statistics are computed on exact, order-invariant accumulator states ([bitrep](#), open source, formally verified in Lean 4) — the same payroll produces byte-identical results on any machine, in any processing order.

4 Method & scope

Pay = ordinary basic salary plus complementary/variable components (Article 3(1)(a)). Quartiles are equal-count bands of total pay. Categories group workers performing the same work or work of equal value (Article 4); category design is documented in the engagement annex. The employee-level payroll was processed locally at the employer — raw pay data was not transmitted to, or retained by, the preparer. Honest scope: this pack makes the computation verifiable and every input attributable; the accuracy of the underlying payroll extract remains the employer’s responsibility.

About this sample. All figures derive from a synthetic 900-employee payroll with a deliberately embedded within-category gap, used to demonstrate the full deliverable including trigger handling. A real engagement produces this pack from your payroll extract, processed on your premises. Sumproof Pay is built on Sumproof — verifiable pooled statistics (validated on 11,312 real UK gender pay gap filings; protocol formally verified in ProVerif and Lean 4). Clouthier Simulation Labs · Petawawa, Ontario, Canada · kyle@simgen.dev · <https://simgen.dev/sumproof/pay/>