

PUBLIC-INTEREST BOARD & CIVIC WORKING PACKET · FREE DOWNLOAD

Water-Infrastructure Governance Field Guide

Grounded in the OECD 12 Principles on Water Governance, the IWA / AWWA M36 Water Balance Standard, the EU Drinking Water Directive (2020/2184), and Open Contracting Procurement Red Flags.

1. The 18-Point Water Governance Self-Check (4 Pillars)

PILLAR	CORE GOVERNANCE CHECK	WHY IT MATTERS	STATUS
1. Budgets & Tariffs (OECD Principle 6: Financing)	1.1 Multi-year capital plan published with top projects & deferrals	Makes infrastructure trade-offs visible	☐ Yes ☐ Gap
	1.2 Operating budget separates staff, energy, chemicals, maintenance & debt	Prevents lumped totals hiding maintenance cuts	☐ Yes ☐ Gap
	1.3 Water revenue ring-fencing rule is documented in law or policy	Stops silent diversion of water fees	☐ Yes ☐ Gap
	1.4 Deferred-maintenance backlog is estimated and dated	Backlog is future emergency liability	☐ Yes ☐ Gap
	1.5 Tariff changes include a 1-page public rationale and timeline	Builds rate legitimacy and trust	☐ Yes ☐ Gap
2. Oversight & Accountability (OECD Principles 3, 9, 11)	2.1 Board meeting calendar and agendas are public in advance	Enables timely civic & board scrutiny	☐ Yes ☐ Gap
	2.2 Minutes and decision summaries are published within a fixed window	Prevents commitments from evaporating	☐ Yes ☐ Gap
	2.3 Quarterly KPI set reported (continuity, water quality, complaints, NRW)	Oversight requires consistent numbers	☐ Yes ☐ Gap
	2.4 Board conflict-of-interest declarations are on file and verifiable	Protects contracting & allocation integrity	☐ Yes ☐ Gap
	2.5 Public inquiry/complaint channel has a named owner and response SLA	Turns complaints into operational learning	☐ Yes ☐ Gap
3. Waste & NRW (IWA Water Balance & EU DWD Art. 4)	3.1 IWA Water Balance / NRW is calculated at least annually (m ³ /day & %)	Separates real leakage from metering gaps	☐ Yes ☐ Gap
	3.2 Leak detection & pipe-renewal priorities are written down	Moves from reactive repairs to active control	☐ Yes ☐ Gap
	3.3 Commercial losses (meter accuracy, billing errors, unbilled use) have an owner	Recovers revenue without raising household tariffs	☐ Yes ☐ Gap
	3.4 Major energy, chemical & civil contracts are reviewed for lock-in	Curbs fiscal waste in operating spend	☐ Yes ☐ Gap

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4. Fair Allocation (UN General Comment 15 & OECD Principle 10)	4.1 Connection & drought-rationing priority rules are written before crisis	Protects clinics, schools & households first	☐ Yes ☐ Gap
	4.2 Tariff structure (fixed vs volumetric, social/lifeline blocks) fits on 1 page	Makes affordability transparent	☐ Yes ☐ Gap
	4.3 Disconnection / arrears policy includes humane hardship protections	Prevents public-health harm from shutoffs	☐ Yes ☐ Gap
	4.4 Allocation & priority trade-offs are recorded in a public Decision Log	Creates an auditable trail of who decided what	☐ Yes ☐ Gap

2. Standard IWA Water Balance & Non-Revenue Water (NRW) Reference

Under the **International Water Association (IWA)** and **AWWA M36** standard, percentage NRW alone can be misleading if total consumption changes. Boards should request both **volumetric loss (litres/connection/day or m³/km/day)** and the breakdown below:

SYSTEM INPUT VOLUME (100%)	AUTHORIZED CONSUMPTION VS. WATER LOSSES	REVENUE VS. NON-REVENUE WATER (NRW)	PRIMARY GOVERNANCE & OPERATIONAL LEVERS
System Input Volume (Own sources + imported treated water)	Billed Authorized Consumption	Revenue Water (Billed metered + billed unmetered)	Ensure accurate customer billing, transparent tariff blocks, and timely collection.
	Unbilled Authorized Consumption	Non-Revenue Water (NRW) · Component A (Firefighting, mains flushing, municipal buildings)	Meter municipal/public standpipes and set clear rules for unbilled public use.
	Apparent (Commercial) Losses	Non-Revenue Water (NRW) · Component B (Customer meter under-registration, data/billing errors, unauthorized connections)	Audit large commercial meters, replace ageing domestic meters, and reconcile billing databases.
	Real (Physical) Losses	Non-Revenue Water (NRW) · Component C (Leakage on transmission/distribution mains, storage overflows, service-connection leaks)	Active district-metered area (DMA) pressure management, acoustic leak detection, and targeted pipe renewal.

3. Ten Budget Transparency Questions for Finance Briefings

- Three-year operating trend:** What is the total water operating budget this year versus the prior two years (budgeted vs. actual)?
- Capital top-five & deferrals:** Which 5 capital projects take the largest share of this year's capital plan—and which needed projects were deferred?
- Capital execution rate:** What percentage of last year's approved capital budget was actually executed, and what caused any slippage?
- Ring-fencing rule:** Are water tariffs and connection fees legally or policy-ring-fenced from general municipal transfers? Where is the rule written?
- Deferred-maintenance backlog:** What is the estimated asset-renewal backlog in euros/currency, and when was the condition assessment last updated?
- Cost-driver split:** What share of operating expenditure goes to energy, chemicals, personnel, routine maintenance, and debt service?
- Tariff rationale & affordability:** When were tariffs last adjusted, what public calculation was published, and how are low-income households protected?
- Contingent liabilities:** Are there guarantees, legal claims, or PPP/concession minimum-volume clauses that could hit the water budget?
- Grant & subsidy sensitivity:** Which external grants or loans are assumed in the capital plan, and what is the fallback if they are delayed?
- Public document access:** What is the direct public URL where a resident can download the current budget and latest audited financial statements?

4. Sixteen Procurement Red Flags (Tendering, Variations & Handover)

STAGE	RED FLAG PROMPTS TO ASK BEFORE APPROVING AWARDS OR VARIATIONS
Tendering (R1–R4)	☐ Single bidder without documented market analysis · ☐ Unusually short tender window · ☐ Technical specs tailored to one brand · ☐ Evaluation weights altered after bid opening
Variations (R5–R8)	☐ Scope changes executed before written approval · ☐ Cost overruns paid without board re-authorization · ☐ Multiple small change-orders just below review thresholds · ☐ Repeated unrecorded deadline extensions
Handover (R9–R12)	☐ Missing as-built GIS/CAD drawings · ☐ Final milestone paid before independent commissioning test · ☐ Missing pressure/water-quality test logs · ☐ Unclear defect-liability warranty tracking
Integrity (R13–R16)	☐ Missing conflict-of-interest declarations · ☐ Redacted/unavailable contract terms · ☐ Same official specifies, awards & signs off · ☐ Unanswered staff or resident safety/quality warnings

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