Roads & transport · In Dubai, signals are run by RTA (Nodal has no agreement with RTA)

Dubai Flow — Adaptive traffic signal control & corridor twins

The next junction is full. Which light should turn green? Which changes reduce waiting on your corridor while keeping pedestrian crossings, side streets and emergency routes within their limits?



01 · UAE REGULATORY & OPERATIONAL SCALE

RTA planned to upgrade roughly 300 signalised junctions across key Dubai corridors to UTC-UX Fusion by Q3 2026, reporting 16% to 37% traffic-flow improvements on upgraded corridors in phase one (Dubai Media Office, 4 Sep 2025).

02 · ZERO-RISK START (UTILITIES & CITY INFRASTRUCTURE)

4-week corridor twin study at AED 0 upfront under NDA using 30 days of detector counts, signal logs, stage diagrams and intergreen/pedestrian timings for one corridor (zero controller login; authority keeps the twin). A 60-day read-only shadow run follows on terms agreed after the study.

03 · AUDITED STAGE, BENCHMARKS & OPERATING BOUNDARIES

Stage: Simulated, internal review (own synthetic queue model, two-phase junctions without pedestrian stages). On four Dubai districts, median waiting fell 13% vs standard actuated control (20 tests, win in 18) and 45% vs best-cycle fixed-time; against best-practice actuated control it was level in 19 of 20 tests (worth nothing measurable, with 1–4% more stops), and a junction reflex under a simplified central plan changed nothing in 28 of 28 tests. Not tested under UTC-UX Fusion, on RTA's data or by an outside auditor.

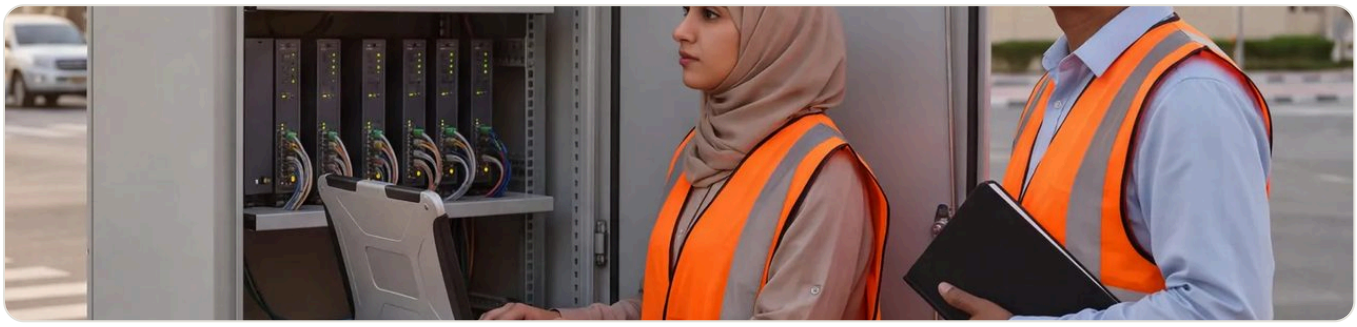
COMPATIBLE SYSTEMS & STANDARDS

UTC-UX Fusion Context · Actuated Signal Controllers · Detector Counts & Stage Logs · Hardware Intergreens

Verification Protocol · Zero Live Access

How the 4-week offline audit runs at AED 0 upfront.

Proven offline on your historical records before anything is switched on — with your own engineers, clinicians, surveyors or licensed customs staff keeping final sign-off.



Two safe ways to verify without system logins

NO VPN · NO LIVE CREDENTIALS

Option A · Read-only CSV/Excel slice under NDA

Share an agreed read-only historical export under mutual NDA. Nodal returns a quantified, line-referenced report in writing for your operational lead to verify.

Option B · Self-run by your own IT

Your IT runs Nodal's auditable offline checker locally on a standalone machine inside your UAE boundary and shares only the summary table if you choose.

How does a road authority evaluate Dubai Flow without risking live traffic?

Start with a 4-week offline corridor twin study at AED 0 upfront from 30 days of historical detector and signal logs (which the authority keeps), before deciding on a 60-day read-only shadow run that writes nothing to live controllers.

How did Dubai Flow compare against best-practice actuated control?

In 20 simulated tests on four Dubai districts, it cut median waiting 13% vs standard actuated and 45% vs fixed-time, while finishing level (19 of 20, worth nothing measurable, with 1–4% more stops) against best-practice actuated control. It has not been tested under UTC-UX Fusion or on RTA data.

Are pedestrian stages and safety intergreens ever overridden?

Never. Hardware intergreens, minimum greens and pedestrian clearances stay locked in the roadside controller.

Delegate in one forward — no introductory call required

Web dossier: nodal.systems/dubai-flow.html · Written checklist & mutual NDA: santiago@nodal.systems

AED 0 UPFRONT