

The official app of LAGA 2026 runs on urbanOS.

For the 2026 State Garden Show (Landesgartenschau) in Neuss, dataMatters built the official companion app — with an interactive park map, the AI assistant Flori, and 121 sensors live in the park. One codebase for iOS, Android and Web, delivered on time for the opening in under six months. It started with a live-image page that went online within a few days. Both run on the same sovereign Urban Data Platform that municipalities receive with urbanOS.

PROJECT Official companion app "LAGA Neuss 2026" (myLAGA) and live-image page	EVENT PERIOD 16 April – 11 October 2026
LOCATION Neuss, North Rhine-Westphalia	PLATFORM urbanOS – Urban Data Platform with DataCore as the time-series data layer
DELIVERY dataMatters – platform urbanOS, DataCore and app from a single source	AVAILABILITY iOS, Android and Web from one codebase – trilingual (DE/EN/NL)

The starting point

A State Garden Show is a temporary city district: half a year of operation on a site that visitors enter for the very first time. Those who come want to get their bearings, find routes that suit them — on foot, by wheelchair or with a stroller — know where a parking space is still free and when the next train departs. At the same time, the site is fitted with modern environmental sensors whose data should not vanish into vendor silos, but tell the visitors themselves something worth knowing.

The conventional path would be point solutions: an off-the-shelf event app, a webcam page, sensor data locked in each manufacturer's own portals. For an event with a fixed opening date, that is doubly risky — every isolated solution costs integration time, and none grows beyond the occasion. Development of the app began at the end of October 2025; the gates opened on 16 April 2026. For that timeline, what was needed was a data backbone that already carries the load, rather than one still being built.

The solution

dataMatters built the official companion app "LAGA Neuss 2026" on the basis of CityApp and urbanOS — as one codebase for iOS, Android and Web, connected to the sensor register and the time series of the urbanOS data platform. Six building blocks make up the digital LAGA.

The companion app: map, routes, navigation

An interactive vector map (Mapbox GL) shows the site with GPS position; curated themed routes guide visitors through the park with step-by-step navigation and voice guidance. The routing knows barrier-free paths for wheelchairs and strollers, and a shade-zones overlay helps on hot days. On first launch, visitors choose their interests, their visit context — alone, family, group or school class — and their mobility; the app remembers favourites and speaks German, English and Dutch.

Flori, the AI assistant

Flori answers questions by text or voice, with streaming responses and a knowledge base about the site — technically built on Nova by dataMatters. Four personas adapt tone and depth to age and prior knowledge; Flori knows each visitor's location, mobility, interests and language, and gives tips drawn from weather, time of day and place. In narrator mode, Flori accompanies visitors along the routes — and with "Talk to the tree," it speaks as a specific tree at the roadside.

121 sensors live in the park

121 sensors deliver live data from the site into the app: 4 weather stations, 16 CO₂ sensors, 17 noise sensors, 15 soil sensors, particulate-matter measurement and a water sensor — plus 40 sensors on 40 trees, whose readings the app shows with historical trends. The metadata comes from the sensor register of the urbanOS data platform, the time series from DataCore — in productive use, not as a demo.

Nature, hands-on

BirdNET birdsong recognition listens in real time: the microphone and the recognition model run directly on the device, and a live spectrogram shows what the app hears. As you walk, the map reveals itself piece by piece — with discovery cards and progress. With the Best Places reporter, visitors share their favourite spots as moderated, geographically located photo contributions; EXIF data is removed, and the personal field book collects their own discoveries.

Live information for your visit

The app shows parking occupancy in real time — 860 spaces and 20 disabled parking spaces at the LAGA car park, plus the Neuss parking garages — as well as public-transport departures including Neuss Hauptbahnhof and current weather from the stations on the site. Live webcams look onto bird hotels, squirrel dreys and a rabbit burrow, each with an automatic AI image description; the cameras show animals, not people. The Visitor Pulse makes occupancy visible anonymously: the raw data stays server-side, and only qualitative levels reach the app.

The live-image page: the quick entry point

Even before the app, a public page went online in November 2025 in the official LAGA visual identity: "Live from the site," updated hourly, full-screen on a click — on mobile too. The camera delivers its images into DataCore; the page fetches them server-side, so the access credentials never reach the browser. An AI image model generates a visitor-friendly German description of each image, strictly limited to what is visible. The core was built in a few days — the first proof that the foundation holds.

The architecture: one data backbone, three platforms

The companion app and the live-image page share one foundation: the urbanOS data platform. The sensor register describes the sensors on the site, DataCore delivers the time series — and each application accesses them in a controlled way, instead of forming its own data island.

- ✓ urbanOS as the data backbone: the platform's sensor register (accessed via Keycloak) holds the 121 sensors, and the time series come from DataCore.
- ✓ One codebase, three platforms: Nuxt 4 and Capacitor deliver the iOS app, the Android app and the web version from the same code.
- ✓ Go services in the backend: routing engines for footpaths and barrier-free routes, Redis and push notifications; geodata lives in Supabase with PostGIS.
- ✓ Operated on AWS: Amplify for delivery, Lambda for streaming the AI responses, S3 and CDN for media — the sensor data itself stays in the urbanOS data platform; product analytics runs on PostHog with EU hosting.
- ✓ Privacy by design: Visitor Pulse raw data never reaches the client, community photos lose their EXIF data, accounts can be deleted in a GDPR-compliant way — and the webcams show bird hotels and animals, not people.
- ✓ 3D capture: 3D scans of the site created with Scaniverse are available as a collection in the app.

What lasts

On time for the opening

Development began at the end of October 2025; on 16 April 2026 the State Garden Show opened — with the finished app in the App Store, on Google Play and on the Web. Less than six months from the first line of code to launch, delivered by a small team against a fixed deadline.

One backbone, many applications

The live-image page and the companion app run on the same data platform. The map, the tree data and Flori all draw on the same foundation — every new application starts on data that is already there.

Privacy as architecture

Anonymous occupancy instead of individual tracking, birdsong recognition directly on the device, EXIF removal for community photos, GDPR-compliant account deletion. Here, trust is architecture, not a footnote.

Transferable to municipalities

The LAGA uses the same platform that your municipality also receives with urbanOS. What carries a major event with a fixed opening date — sensors, live data, AI assistance — also carries your day-to-day operations, from tree care to visitor flow management.

urbanOS by dataMatters is the Urban Data & Intelligence platform for smart cities — it connects sensors, data and everyday administration on one sovereign platform, where access credentials and data flows stay secured server-side. The official companion app of LAGA 2026 Neuss was built on the basis of CityApp and urbanOS — platform, data layer and app from a single source at dataMatters.

Let's talk about your city.

A short conversation is enough to see what your municipality could measure, know and improve. We'll show you the platform on real data — no obligation, and in English.

urbanos.datamatters.io/contact