



PLATFORM OVERVIEW · FOR END-USERS & PARTNERS

Ethical AI for Public Safety

Turn any camera network into an intelligent, ethical security ecosystem.

250,000+ cameras across 8 countries · 100,000+ cameras proven per single instance

Four Forces Reshaping Video Intelligence



Agentic AI

AI now takes a goal, plans the steps, and runs the whole task – not just a single answer to a single question.



Vision-Language Models

Cameras that understand plain language. New detectors appear from a sentence – no datasets, no training cycles.



Strict AI Regulation

The EU AI Act era: transparency, human oversight, and non-erasable audit trails become mandatory for high-risk AI.



Technology Sovereignty

Rising geopolitical conflict pushes nations to run critical AI on their own hardware, inside their own borders.

IREX is a cloud-based video-intelligence platform — **real-time threat detection**, investigation agents, and Vision-Language Models across your existing cameras, from one site to a whole country.



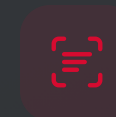
Real-Time Threat Detection

Specialized AI modules watching every camera, every second.



Agentic Investigations

Video search and Ask IREX run multi-step searches from plain language.



Prompt-Defined Detectors

StreamVLM™ turns a sentence into a working detector.



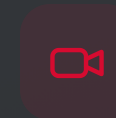
Engineered for Ethics

Transparency by Design – a Case ID on every high-risk action.



Sovereign Private Cloud

Your hardware, your data, national scale.



Works with Existing Cameras

No rip-and-replace – an upgrade path, not a forklift.

Connecting Thousands of Users to Thousands of Sensors

IREX brings the cameras and sensors you already operate onto one secure platform, then puts what they see in the hands of the people who keep communities safe.

DATA SOURCES

SECURE PRIVATE CLOUD

OPERATIONAL USERS



Describe what to detect. In plain English.

StreamVLM™ turns a text prompt into a working detector – no datasets, no training, no waiting. Shipping in beta on selected instances; included in the standard IREX price.

“Person lying on the ground”

“Graffiti on a wall”

“Flooding in the underpass”

“Illegal dumping”

Multiple VLM detectors per camera · real-time alerts · every match logged

What is a Vision-Language Model? An AI model that has learned to connect what it sees with the words people use to describe it – so it can be told what to look for in a sentence, instead of being trained on thousands of labelled examples first.



Person lying on the ground · StreamVLM™

CAM 12 · Station concourse
Today 06:41:19 · Case ID #IRX-2026-0417

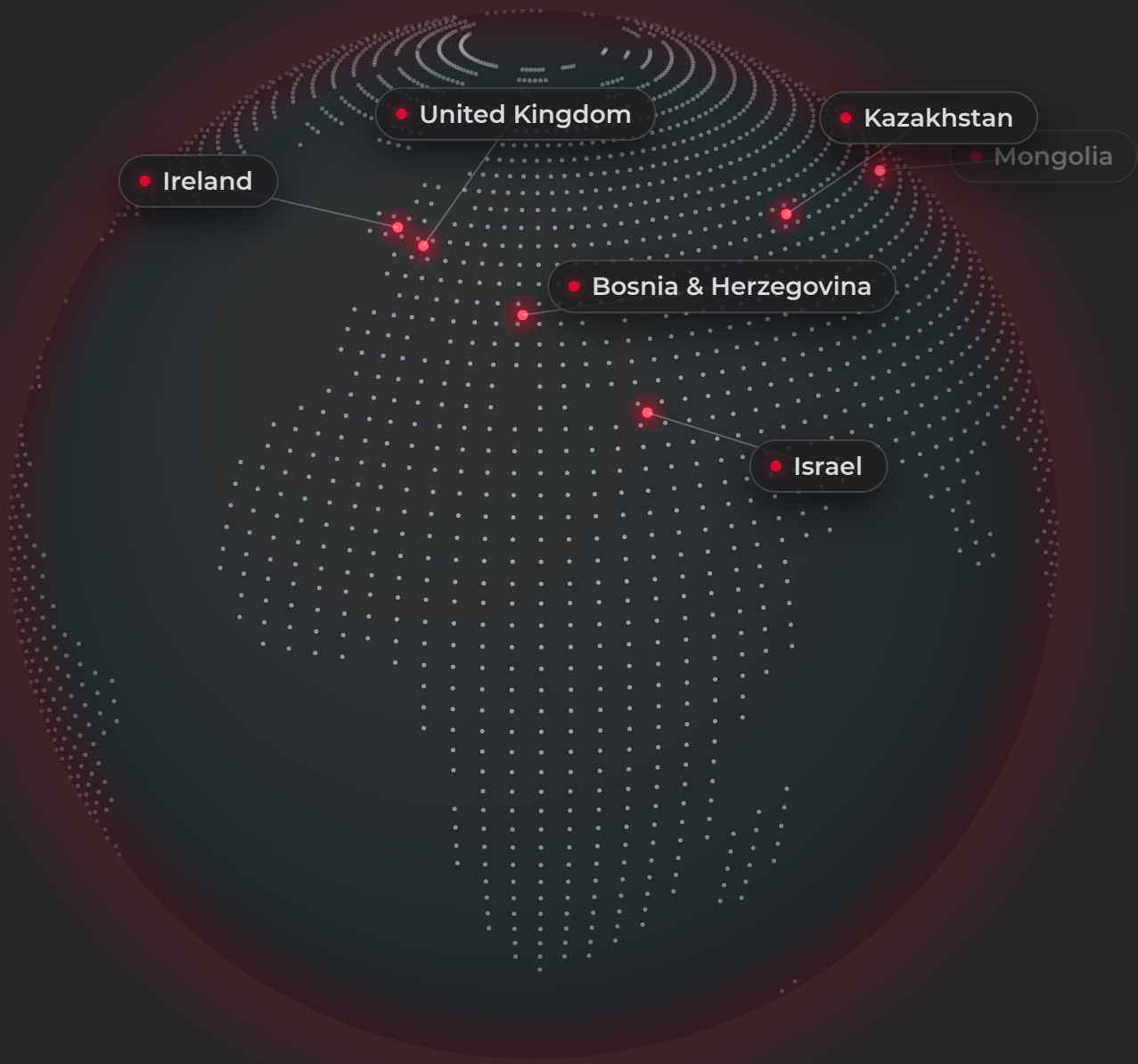
Play Video

Share

Investigate in Plain Language

Search people, vehicles, and events across petabytes of video – by map, filter, or natural language (English, Spanish, Arabic). The investigation agent reads intent, cross-references watchlists, and runs the multi-step search through the IREX API.

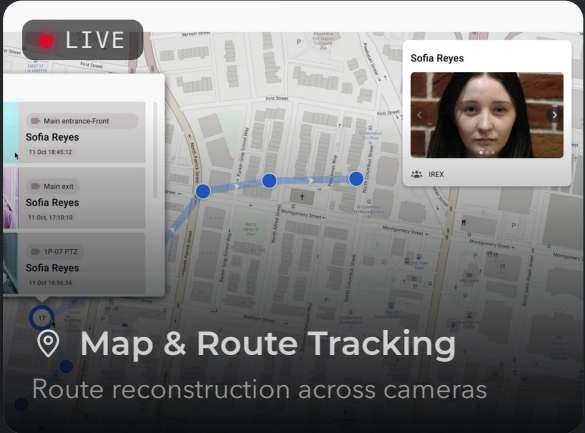
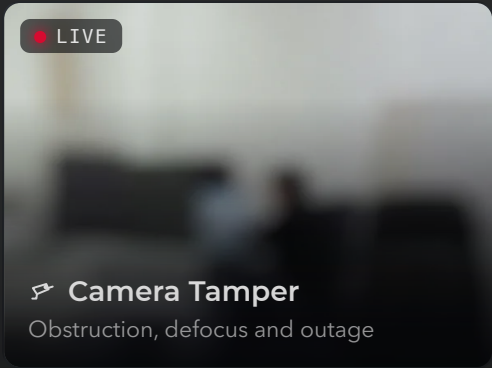
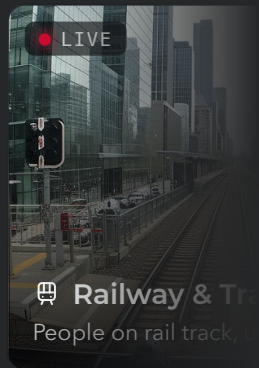
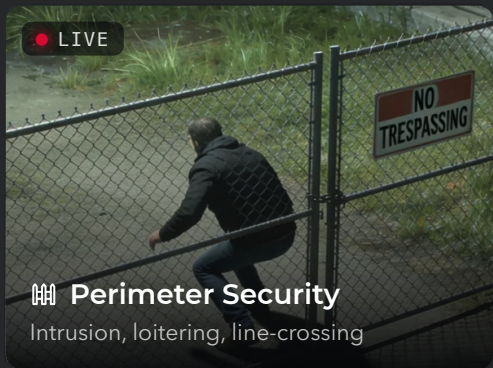
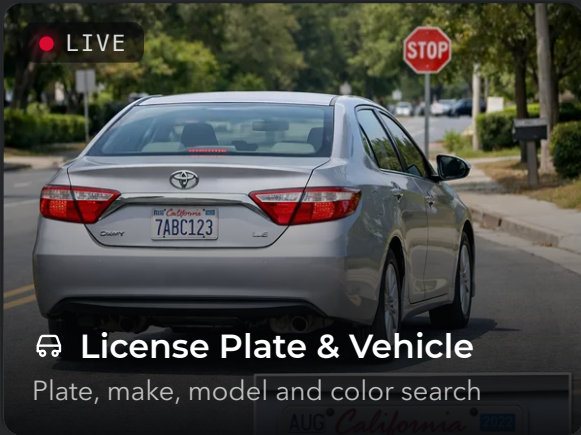
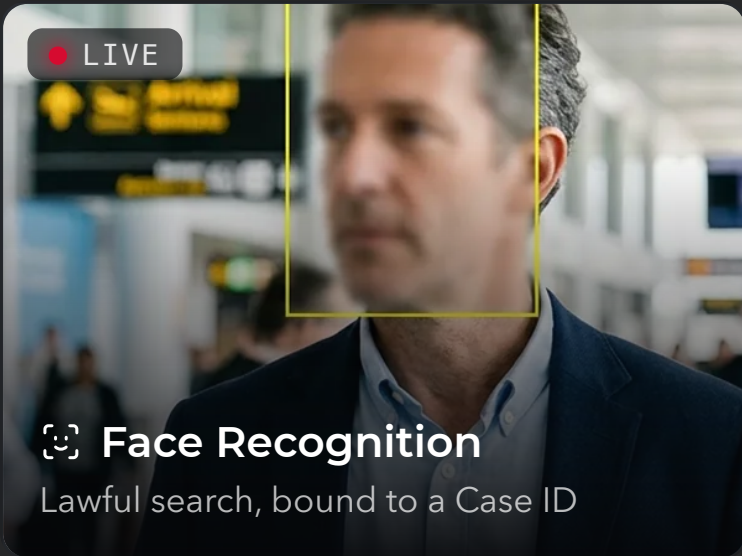
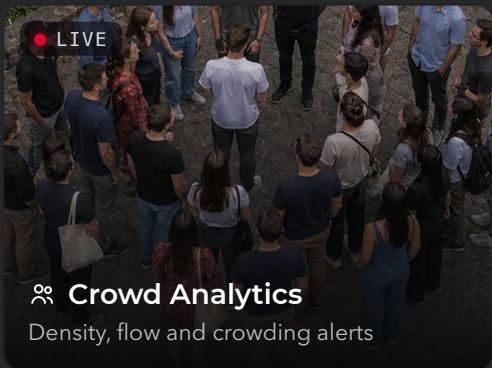
Proprietary descriptor clustering and indexing searches through **billions of objects** – faces, person figures, and vehicles.



Ask IREX · Beta

Natural-language queries and investigation agents – from the main IREX interface and from a **Sover** chat – same Case ID, same permissions, same audit log.

Turn All Your Existing Cameras into Super-Focused Agents



Engineered for Ethics, Not Just Performance



Case ID: Required for Every Search and Every Access to Data

Before an operator can search, watch, or export anything, the platform demands a **Case ID**: a reference to the lawful grounds for that action – a case file, court order, or missing-person report. Who acted, what they did, when, and why is written to one consolidated, non-erasable Logbook, exported daily as digitally signed files that supervisors and independent oversight bodies can audit.

People searches

Vehicle searches

Event searches

Watchlist changes

Alarm monitors

Live & archived video

Evidence export



Full Transparency

Every action – searches, database edits, alert configuration, exports, permission changes – lands in a searchable audit log that cannot be erased.



Cybersecurity & Privacy

Private cloud on open-source components: TLS 1.3 end to end, WAF/IDS/IPS in depth, JWT with rotating keys, MFA, and penetration testing every major release.



Narrow Constraints

Pre-identified people only – wanted suspects, missing children, trafficking victims. Biometric database size is capped; random individuals cannot be recognized or tracked.



Permission-Driven Interface

Hierarchical role-based access: cameras, databases, modules, alerts, and results appear only for the roles that need them. Configuration is top-role only, and logged in full.



Bias Awareness & Mitigation

Balanced training data and continuous tuning on a 40-million-image dataset optimized for CCTV. Where systematic bias exists, IREX discloses it and its estimated impact.



Ethics Best Practices

User guidelines, audit processes, and compliance checklists built with outside experts – designed to support FBI CJIS, GDPR, and the EU AI Act.

Your Data. Your Hardware. Your Rules.

The cameras, the servers, and the people who use them all sit inside one network you control – nothing leaves it unless you decide.

100% open source, inspectable – Kubernetes, Ceph, Cassandra, Kafka; no lock-in; source review and escrow for sovereign customers.

National scale – up to 1,000,000 cameras, 100,000 users, and 1-year retention; triple replication and automatic failover.

Hardware-agnostic – your CPU/GPU mix on bare metal, private cloud, or fully offline; IREX never owns or accesses your data.

Open analytics – continuous export to Apache Superset dashboards: heatmaps, suspect analytics, compliance auditing.

IREX runs on **bare-metal hardware in a self-contained private cloud** with state-of-the-art security. **No third-party commercial components are required.**

Full technology transfer is available – including an unrestricted country-wide license, source code, and local team training.



Proven scale. Measured impact.

● SCALE

100,000+ Cameras per single instance	250,000+ Cameras deployed globally	1,000+ Active users globally	8 Countries in production
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● IMPACT

20%+ Crime reduction in the first year	10x+ Reduction in response time vs. manual surveillance	100x+ Reduction in investigation time vs. manual surveillance	100% Data ownership, control and audit
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Figures reflect IREX platform deployments and can be confirmed under NDA. Outcomes vary by site, configuration, and agency processes.

DEPLOYED WORLDWIDE



In Production across 8 Countries



PERU

National Police and multi-city command centers

UNITED KINGDOM

London Underground safety and critical infrastructure

UNITED STATES

Southern California law enforcement, multi-jurisdiction

IRELAND

Dublin Airport: watchlists, unattended items, weapons

MONGOLIA

Nationwide multi-camera traffic enforcement

KAZAKHSTAN

National smart-city program, full AI module catalog

BOSNIA & HERZEGOVINA

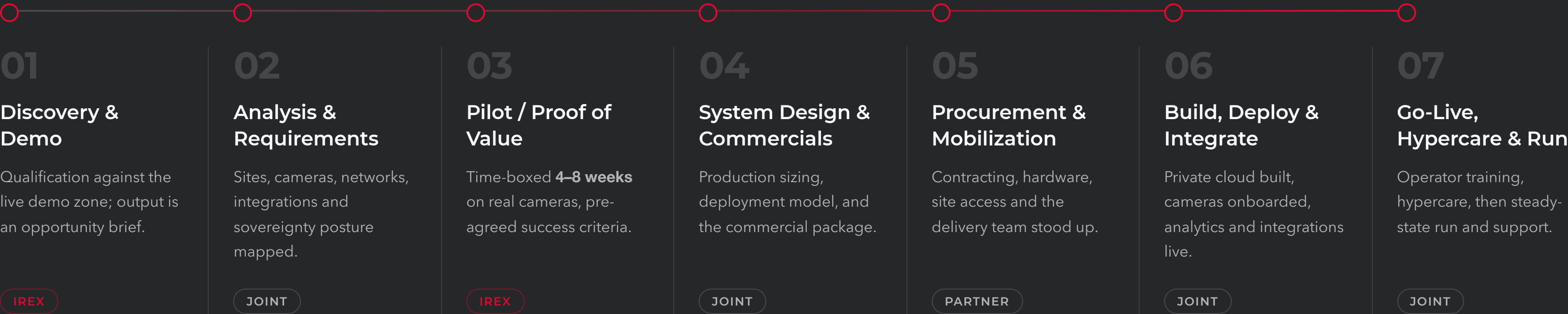
Premier League stadium security, banned-fan watchlists

ISRAEL

Retail loss prevention, repeat-offender alerts

From Demo to Go-Live in 6–12 Months

Seven stage-gated phases. Each gate has named owners and a written output before the next one starts.



IREX owns the platform & cloud (L3/L4); the certified integration partner owns site, network, onboarding & first-line support (L1/L2). Governance: weekly delivery standup, bi-weekly steering committee, monthly executive review.

WHO WE ARE

IREX

A Global Team with Security, Fortune 500, and AI Experience



Calvin Yadav

Co-Founder & CEO



Nik Ptitsyn, PhD

President, CTO & Co-Founder



David K. Bain

Advisor, Ethics & Compliance



Juan Felipe Gonzalez

Advisor, Investments



Daniel Eborall, MBA

Advisor, Partnerships



Chris Pritchard

Director of Operations & Deployment



Alex Peterson

Business Development



Denis Koch

Sales Operations



Roberto Varela

Business Development, LATAM



Luís Pinto Ferreira

Public Sector Partnerships

100+ people

50+ engineers & data scientists

~30 in machine learning

Built with Partners We Trust

Leading technology companies extend the platform – and mission-driven organizations put it to work protecting people.

TECHNOLOGY PARTNERS

MISSION PARTNERS

			
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Your cameras.
Your data.
Your rules.

Request Pilot with Your Own Camera Feeds



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