

Crop Urbanis Intelligence Layer

Technical brief for cloud, AI and programme review

Public product edition - 21 August 2026

PRODUCT STATUS

Operational internal MVP. Selective private beta by contact. Public self-service is not offered.

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Technical summary

The Crop Urbanis Intelligence Layer powers an operational internal MVP for CEA project intelligence. It combines unstructured document processing, structured project data, deterministic scenario services and expert-review controls.

Internal MVP	Operational internal workflows for evidence, requirements, scenarios, review and delivery control.
Selective private beta	Organisation access is considered manually through contact and separate written terms.
Cloud deployment stage	The current build is being hardened for controlled organisational deployment, not public self-service.

Product status and public claims are maintained against the current website source.

Architecture and control boundary

The architecture connects public enquiry to a controlled beta path while keeping approval, monitoring and data boundaries explicit.

01	Public site and contact	Informational pages and high-level enquiry only.
02	Controlled beta entry	Manual qualification before any organisation invitation.
03	Identity and organisation	Scoped users, roles and organisation context.
04	API and application	Controlled product workflows and versioned service boundaries.
05	Project database	Structured project, requirement, scenario and decision records.
06	Object and document storage	Permissioned sources, files and provenance references.
07	Document workers	Extraction, normalisation and exception handling.
08	Retrieval and vector services	Permissioned search and source-linked information retrieval.
09	AI inference	Bounded task routing and controlled drafting assistance.
10	Deterministic services	Reproducible calculations, constraints and scenario comparisons.
11	Review and approval	Human decision states, exceptions and responsibility.
12	Output and export	Traceable decision records and delivery material.
13	Monitoring, logs and backups	Operational visibility, recovery planning and controlled hardening.

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Data model and connected modules

The model treats a project as a controlled set of linked records rather than a collection of isolated files.

Core records

- Project, evidence, requirement, constraint and alternative.
- Supplier, scenario, review, decision and output.
- Audit event, source version, owner, permission and approval state.

Connected modules

- Project Brief and Data Room.
- Requirements and Constraints.
- Crop and Production Configuration.
- Supplier Intelligence, Scenario and Economics.
- Delivery and Decision Control, Commissioning and Handover.

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AI and reliability controls

AI does not silently own arithmetic, safety decisions or final agronomic judgment. The system maintains a reviewable path for uncertainty and exceptions.

Task routing	Use a bounded task type, input context and permitted information scope.
Schema validation	Check extracted and generated fields against expected structure and units.
Source trace	Retain source references, version and confidence context with the output.
Deterministic checks	Run explicit calculations and constraints outside the language model.
Retry and exception	Flag missing inputs, contradictions and failed steps instead of guessing.
Review state	Require qualified review where a decision crosses agronomic, engineering, safety or regulatory responsibility.
Evaluation and cost	Measure failure modes, review usability and inference cost before expanding a task.

Product status and public claims are maintained against the current website source.

Security and data governance

The public form accepts high-level context only. Project data for selected organisations is governed by the separately agreed beta scope and terms.

Governance questions

- Which users and roles need access to which records?
- What purpose, region, retention, export and deletion rules apply?
- Which subprocessors, confidentiality commitments and review controls are agreed?

Professional responsibility

- Crop Urbanis supports information, scenario and decision workflows.
- Qualified people and organisations retain responsibility for agronomy, engineering, safety, regulation, supplier confirmation and project acceptance.
- No certification, universal encryption, availability or residency assertion is made without verified scope and implementation.

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Cloud workload and 12-month credit use

Cloud credits accelerate the private-beta hardening path by reducing infrastructure constraints while work stays controlled and evidence-led.

Workload categories

- Application compute, database, object storage and background processing.
- Inference, embeddings and retrieval.
- Monitoring, logs, backups, development and staging.
- Security controls, identity and controlled tenant separation.

Why credits matter

- They allow architecture, evaluation and resilience work before private-beta expansion.
- They support cost-controlled testing of document, retrieval and scenario workloads.
- They do not imply a public product launch, public demo or unsupported scale claim.

Private-beta access is selective and governed through separate terms. Public self-service access is not offered.