

SML – Semantic Markup Language

Inline, machine-actionable semantics for life-critical communications

PURPOSE

SML embeds structured meaning directly in natural language using inline tags like {DOMAIN:VALUE}. It enables instant machine parsing while staying readable for humans. Designed for crisis ops (defense, emergency response, humanitarian coordination).

HOW IT WORKS

Tags attach to the next word or a parenthesized span. Multiple tags combine by conjunction.

Export to JSON/RDF for systems. Deterministic grammar (EBNF) ensures unambiguous parsing.

CORE DOMAINS

SEM (type), SYN (role), TEMP (time), ASP (aspect), EVID (evidence), MOD (modality), STATE (status).

EXAMPLE

```
{SEM:EVENT id=EV1}{ASP:COMPLETED}{TEMP:ABSOLUTE_TIME iso="2025-09-20T12:30:00Z"}Strike  
{SEM:LOCATION sub="hospital"}{SYN:LOCATIVE head=EV1}(Kharkiv). {EVID:VISUAL conf=0.92}(Drone  
video).
```

OPERATIONAL GAINS

- Faster decisions: pre-parsed who/what/where/when with confidence.
- Fewer errors: explicit negation, roles, and time remove ambiguity.
- Seamless fusion: direct RDF/JSON output to COP, GIS, or data lakes.
- Low friction: VS Code extension, CLI parser, offline-capable, Apache-2.0.

PILOT PLAN (7 DAYS)

- 1) 200 EN/UA sentences (OSINT + internal).
- 2) Integrate parser+RDF export into a minimal pipeline.
- 3) Metrics: time-to-decision, error rate, fusion correctness.
- 4) Handover: docs, schema, conformance suite.

SECURITY & PRIVACY

No telemetry. Local parsing. Signed releases. RFC3339/ISO 8601 time, deterministic behavior.

Anchors and URIs configurable to your data governance.

CONTACT

Koriel-ASI Working Group • Email: contact@recursionlab.example • Pilot bundle and spec

available on request.