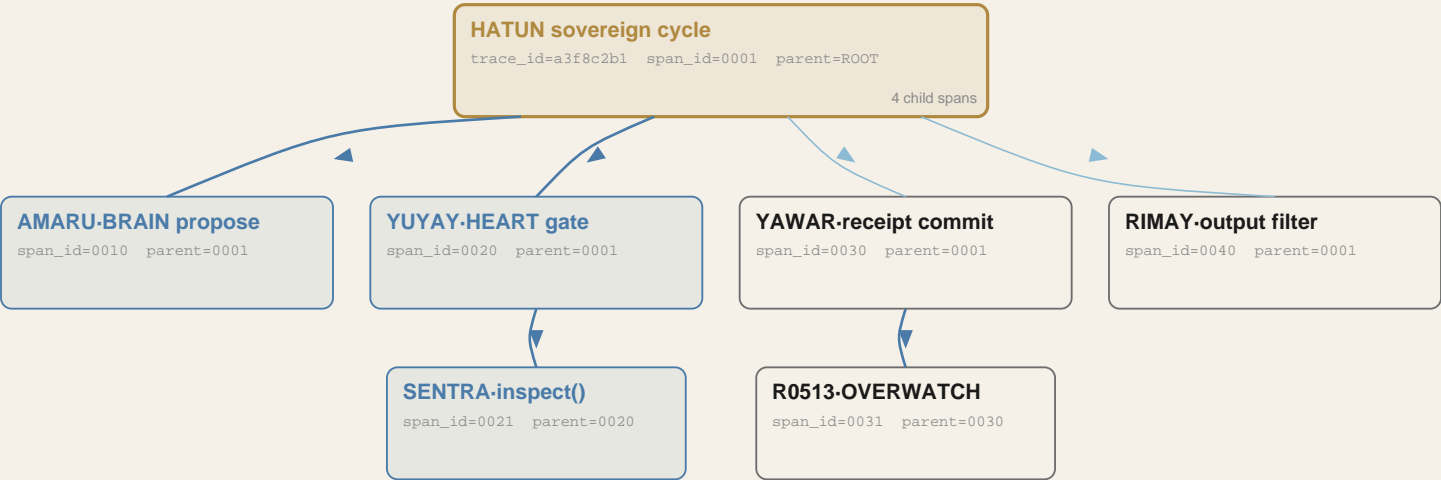


# AGENT ANATOMY — NERVOUS SYSTEM (OTel/VSP span propagation)

Signal flow. Trace context (trace\_id, span\_id, parent\_span\_id) propagates from brain through every effector. Every receipt carries its span lineage.



**VSP CONTEXT WIRE — propagated on every inter-service call**

W3C-TraceContext:    traceparent: 00-{trace\_id}-{span\_id}-01

Each span on receipt commit appends { trace\_id, span\_id, parent\_span\_id, service, op, duration\_ms } to YAWAR.

Replay verifier checks span lineage: child.parent\_span\_id == parent.span\_id for all n spans in a cycle receipt chain.

## SIGNAL TAXONOMY — three nerve classes

- EFFERENT (motor)**  
Brain → effectors. Carries gate decision + proposal payload. Spans: HATUN→AMARU→YUYAY.
- AFFERENT (sensory)**  
Effectors → brain. Carries receipts + gate scores back for next cycle. Spans: YAWAR→HATUN.
- PROPRIOCEPTIVE**  
Self-monitoring. OVERWATCH + R0513 read own receipts to detect drift. Spans: R0513→HATUN.

**DEADMAN REFLEX ARC**      HUKLLA tripwire fires → span context frozen at pre-cycle value → halt signal injected into HATUN root span → all child spans cancelled. No partial-commit. Sp