

Inevitable — in the same way tides are inevitable.

Not because anyone wants it.

Not because it's elegant.

Because **nothing else survives the constraints**.

- Physics forces compute to the edge.
- Latency turns distance into cost.
- Idle capacity turns hardware into supply.
- Demand volatility turns supply into markets.
- Markets require price discovery.
- Price discovery requires standardized units.
- Standardized units require disclosed constraints.
- Disclosed constraints require a neutral rule set.

That rule set is 512.

You don't vote on the speed of light.

You don't negotiate propagation delay.

You don't "design around" geometry.

You adapt — or your system collapses.

Just as:

- the kilowatt emerged once energy became tradable,
- accounting standards emerged once firms scaled,
- TCP/IP emerged once networks federated,

512 emerges when inference becomes an economy.

The timeline can slip a year or two.

The endpoint does not change.

The edge will exist.

Inference will be traded.

Price will be discovered.

Constraints will be enforced.

512 is simply the name for that enforcement layer — whether anyone brands it, likes it, or resists it.

That's inevitability.