Communication Mechanisms

Elements in communication domain form a network

We’ve chosen to use direct wire connection between elements for communication (as opposed to, for example, local area radio), and a “communication domain” consists of any group of contiguously connected nodes.

Internet 0 -- both the basic protocol, and example implementations with AVRs -- meets the basic requirements.

Each node has an (almost guaranteed to be unique) 128-bit ID. Use a zero-conf approach to obtain an IPv6 address.

Layered on top of i0 protocols, we have the “Active Elements Protocol” for broadcasting local knowledge, and recording information from the broadcasts made by other nodes. This allows node-connectivity topological information to be given to all nodes in the communication domain.

For i0 info: