Satellite IP Segment

Local Hub A

Node A.0

LORAWAN Path A-1

Community Group A.1

Regional Hub B

Node B.0

LORAWAN Path B-1

Alternate land-based
backup internet connection
for Regional Hub B.0

Community Group B.1

Node B.1.2

HF Path B-BA, 150-200km

Alternate HF Path,
Specified as B-BA/C
200+km

HF Path C-CA
50-150km

Regional Hub C

Node C.0

FSK Path C-0

Community
Group C.1

Node C.1.1

Community Group B.BA.1

LORA Mesh
Link

Community Hub
BA

f1
f2

Node B.BA.1.1

Community Group C.CA.1

Community Hub
CA

f1
f2

LORAWAN Path
C-CA-1

Node C.CA.1.3

Starlink Broadband

Backup Broadband

Alternate land-based backup internet connection for Regional Hub

Regional Hub
-Runs full node
-Holds registered ½ of PSBT
-Stores amounts for telemetry query
-Covers 400+ km radius potentially

Node
(libdogecoin)

HF and LORA
Radios

Wallet data

Full Blockchain

KEK-encrypted
PSBT 2/2 Keys

Community Hubs
-TX/RX longhaul format
-Only do mux/demux/route
-Bridge to local mesh
-Ingress/egress for a city/town
-Do not store data

f1
f2

LORA, PSK, ETC
XCVR with high gain ant.

Long haul narrowband
(Telemetry, Multiplexed)
-Address Query
-Address Creation
-Transaction Manipulation
(Data)
PSBT 1/2s

Short haul LORA, PSK, ETC
For Shibe Stations
Local to Hub
(Telemetry, Simplex)
Queries, Data, PSBT 1/2s

Short haul LORA, PSK, ETC
For Shibe Stations
In Community
(Telemetry, Simplex)
Queries, Data, PSBT 1/2s

Shibe Stations
LORAWAN or similar
Sub-$100 ($30)
Rpi + Interface
Query address,
Form raw PSBT ½ signed

Shibe Stations participate
in local Mesh Network

- Address owners register a KEK (key encryption key) which is hashed on the hub.
- A key is generated (not transmitted) that resides on the hub.
- A key is generated (not transmitted) that resides on the Shibe Station.
- User creates raw TX on Shibe Station, signs locally, transmits kek-encrypted PSBT.
- Uses telemetry to automatedly sign with second PSBT key. TX is transmitted.