

Fibre to the node

Node to the Mesh

Mesh to WIFI

BCS distributed server farm

Neighborhood Employment, Internet, IP Phone, E-Commerce, Privacy and Security

Based on the newly installed NBN Fibre node boxes we would install a base station for a WIFI WAN Network utilising readily available mesh network technologies.

Each Fibre Node would have a Base Station designed as a solar powered Kiosk for communications and commerce. The facilities will be franchised to anyone willing to learn the basics of network installation and maintenance & support. The Base station supplies WIFI to the mesh and acts as a portal for:

- Government agencies – online form filling with compliant software, guaranteed privacy and block chain security.
- Banks & financial institutions
- Health and other agencies
- Accessing Arts Grants & Information.
- A wide suite of useful applications such as Word, Excel, Publisher, Powerpoint, Garage Band, iMovie, anything that is legitimate and not a threat to anyone's security.
- Local, casual browsing or social media interaction.
- iTV, Movie and music server for local and internet material, local playback facilities.

Blockchain set-up:

Before anyone can enter the network they must create their personal blockchain and embed the digital signature that authenticates their identity (Democracy Earth White Paper 31/08/17). This can be done in 10 – 15 minutes at the Base Station and immediately uploaded to the BCS network.

Kiosk Block chain hierarchy:

1. Owners Personal Blockchain: Carries root of verified ID, personal internet metadata, full financial transaction history within the MESH or WIFI domains.
2. DATA ACC: Franchisee transaction ledger for data consumption by residents
3. META ACC: Franchisee transaction ledger for customer's metadata
4. ELEC ACC: Franchisee transaction ledger for local power generation and consumption
5. WTR ACC: Franchisee transaction ledger for supply of pottable water
6. WST ACC: Franchisee Transaction ledger for waste management and resource recycling.
7. FOOD ACC: Franchisee Transaction Ledger for supply of food stuffs, beverages of all sorts
8. RED ACC: Register of fines and demerit points relating to licences – Driving, Drinking, Drug, Criminal.

WIFI Node Chain Hierarchy

1. Owners Personal Blockchain: Carries root of verified ID, personal internet metadata, full financial transaction history within the MESH or WIFI domains.
2. DATA ACC: Franchisee transaction ledger for data consumption by residents
3. Can choose to be included in ACCs 4 – 7

Residential BC Hierarchy

1. Owners Personal Blockchain: Carries root of verified ID, personal internet metadata, full financial transaction history within the MESH or WIFI domains.
2. DATA ACC: Resident transaction ledger for data consumption.
3. META ACC: Resident transaction ledger for personal metadata
4. RED ACC: Personal Register of fines and demerit points relating to licences – Driving, Drinking, Drug, Criminal.
5. Can choose to be included in ACCs 4 – 7

Finances:

All transactions are carried out via exchanges of credit (\$) within a personal block chain. A personal block chain resides on either a personal server, installed as part of the Home Mesh / WIFI point (IP SERVER) or is hosted on the server of a resident with a MESH box+BCS who is serving WIFI locally.

As a data consumer finishes a session the amount consumed is written to both the personal blockchain of the consumer and to the PBC of the Kiosk Franchisee or WIFI node provider.

The same method of transaction recording pays for time and bandwidth consumed at the Base Station Kiosk.

The kiosk franchisee and WIFI nodes can each set their price based on either raw consumption or fixed plans with excess use plans and contingencies. They hold on their DATA blockchain the publicly required metadata, a personal copy of that data is also written to the session data held on their local or hosted BC server. This is private and privileged data and will not be released unless compelled by a court.

Set-up and Maintenance:

1. MESH level – Kiosk franchisee is responsible for the installation and upkeep of the mesh nodes and all the blockchain servers. The block chain servers would have no other traffic or use than the tasks of blockchain server for creation of BC and recording transactions between ledgers, both locally and internet. VPN for administration
2. WIFI Level – The resident who has the MESH + WIFI Node with BCS is responsible for the set-up and maintenance of anyone they choose to supply WIFI Access to.

Questions:

1. What's the configuration needed to power the BCS box?
 - a. Compact, hardy, battery based device – AC connected, WIFI private network connection to MESH Box and IP Server, BCS hardware config?
2. WIFI Mesh to Node Interface? UBIQUITI NBN?
3. WIFI MESH hardware and administrative applications? UBIQUITI?
4. Blockchain hierarchy – feasible?
5. Cost to deliver hardware?
6. Cost for wholesale supply of bandwidth at node? NBN?
7. Cost to deliver PBC creation?