

# Draft

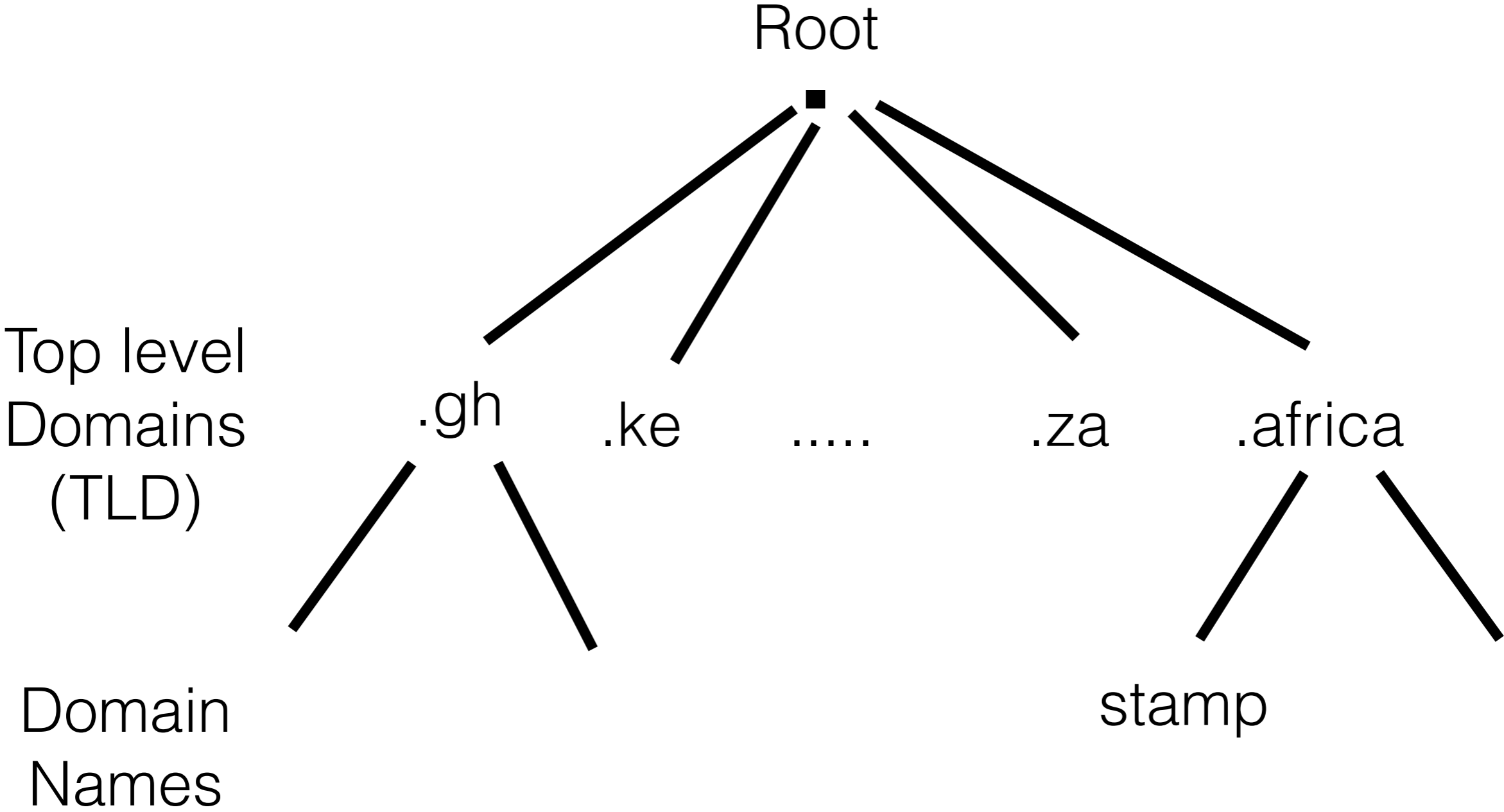
# Stamp.Africa

Send comments to [info@stamp.africa](mailto:info@stamp.africa)

v.02  
15 April 2018

A utility token for “DNS ecosystem” in Africa

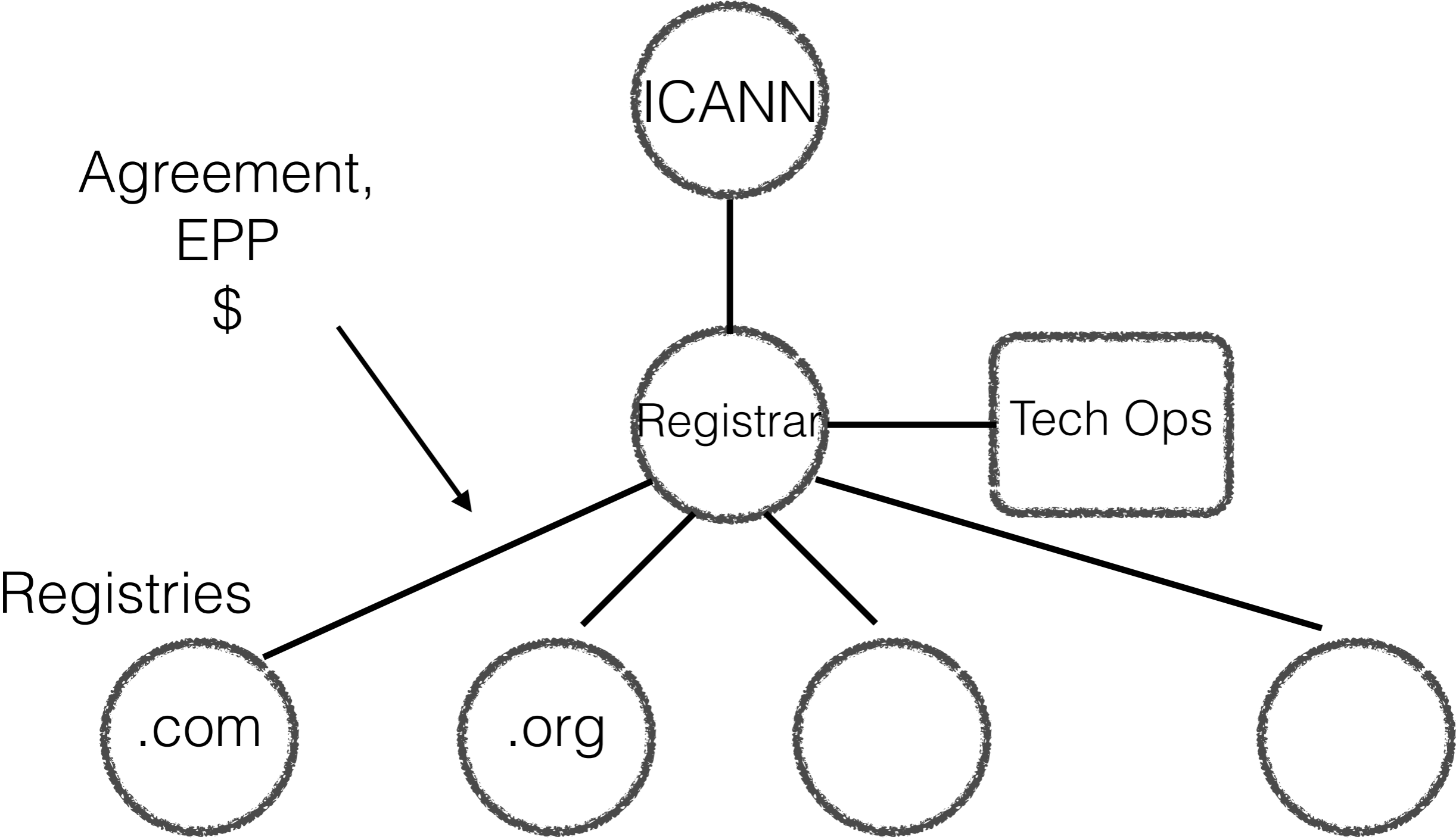
# The domain name space is partitioned



# Africa DNS market study 2016 (ICANN report)

- There are 54 ccTLDs, 5 IDNs, 1 .africa and 3 .city registries in Africa
- There are 15 internationally accredited Registrars and their resellers; >500 ccTLD accredited registrars
- 5 million registrants (1.2 in gTLD and 3.8 in Africa)
- Market annual value of \$52 million
- Cited ease of payment as friction

# Registrar Relationships



Does not scale with increase in TLDs

# The Stamp.Africa problem statement

- How to transfer small amounts in 3R or 4R model, with lower fees and across jurisdictions (registrant->reseller->registrar->registry)
- How to remove the need for African registrars to have credit or deposits at African registries
- Improving Trust in the new networks in Africa

# Blockchain and Crypto currencies

- The Crypto currency, bitcoin, has existed since 2009
- Blockchain, distributed ledger technology, is effective in recording transactions permanently (trust less trust)
- Crypto currencies have potential of low fees
- Global reach (No jurisdictional barriers) cover region of interest

# DNS community in Africa

- Registrants, registrars, registries and technical service providers are building out
- Improving trust in DNS using DNS security extensions, DNSSEC
- Experimenting with “DNS as a STORE” for applications eg IoT devices control



# Stamp.Africa approach

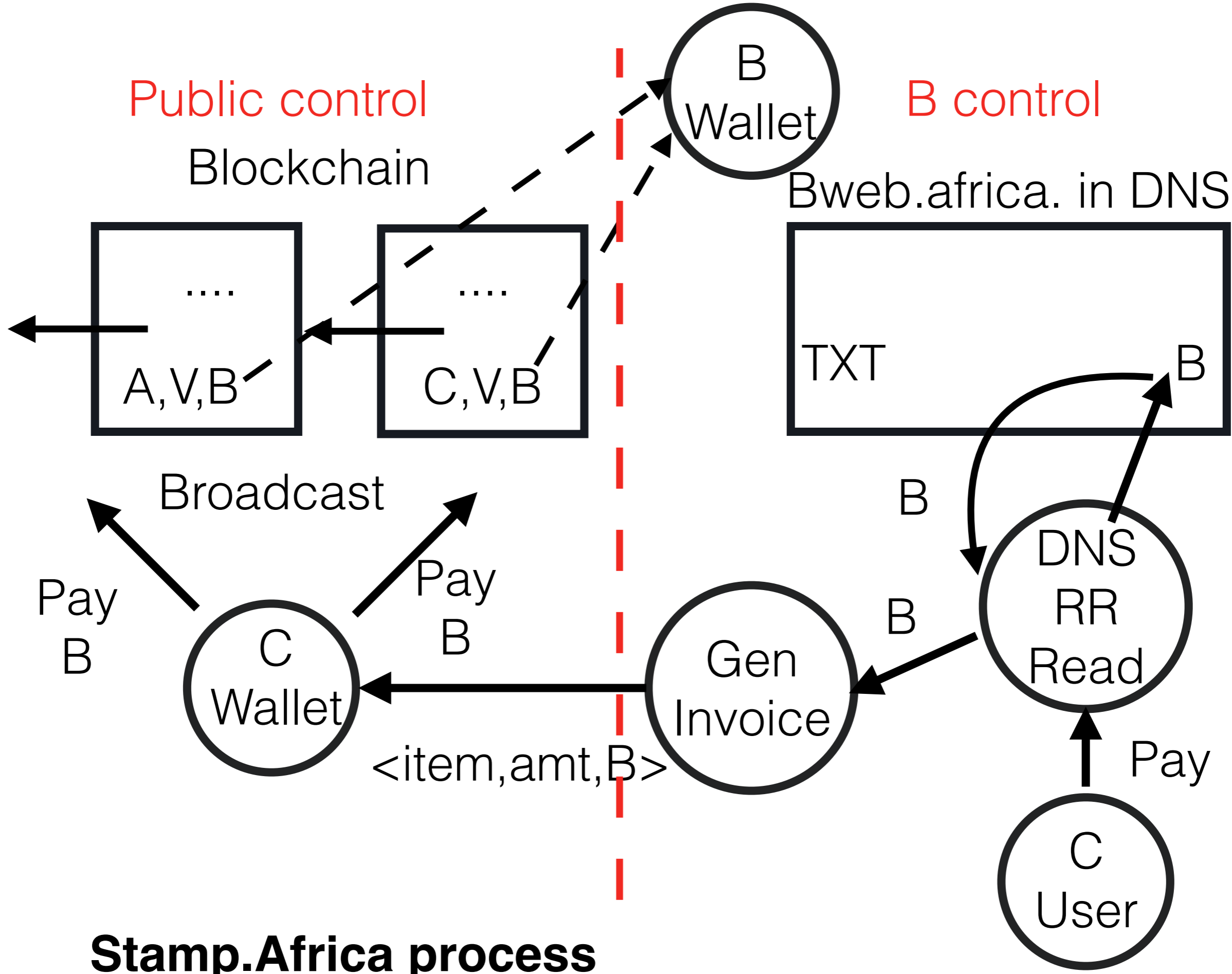
- Combine the DNS “trust” architecture with the “trust less trust” architecture of blockchain
- Use a token to streamline cross jurisdictional transactions in the DNS ecosystem
- Reward for contributing to “trust” infrastructure
- Enable new innovative token based applications

# Stamp.Africa approach(2)

- Create a crypto currency system backed by domain names (initially priced as domain name)
- Build a network of registries, registrars and providers that recognize Stamp.Africa tokens
- Glue the blockchain and the DNS together

# Stamp.Africa and Trust

- Associate a stamp.africa token address with a domain name
- The stamp.africa address is stored in the DNS as a resource record (in a DNSSEC signed zone)
- The domain name participating earns a reward for contributing “Trust resources” to the DNS ecosystem in Africa
- Transactions are stored on blockchain



**Stamp.Africa process**

# Consensus on State

- Proof of Work and Proof of Stake as algorithms to commit state has been widely discussed
- The stamp.africa “**State**” is **{set of all domains in pool | DNSSEC is on ^ RR == stamp.africa address}**
- Commit is thus by Proof of Presence: TLD owner provide DNS resources and Transition process contribute test of presence
- Reward, incentive game design associated with state commit

# Stamp.Africa and economics

- The utility token stamp.africa is used as unit account, store of value and exchange among the DNS ecosystem
- Volume of transactions would be indicative of an economic index in the DNS ecosystem in Africa
- The value of stamp.africa token is expected to rise with increased patronage

# Stamp.Africa services

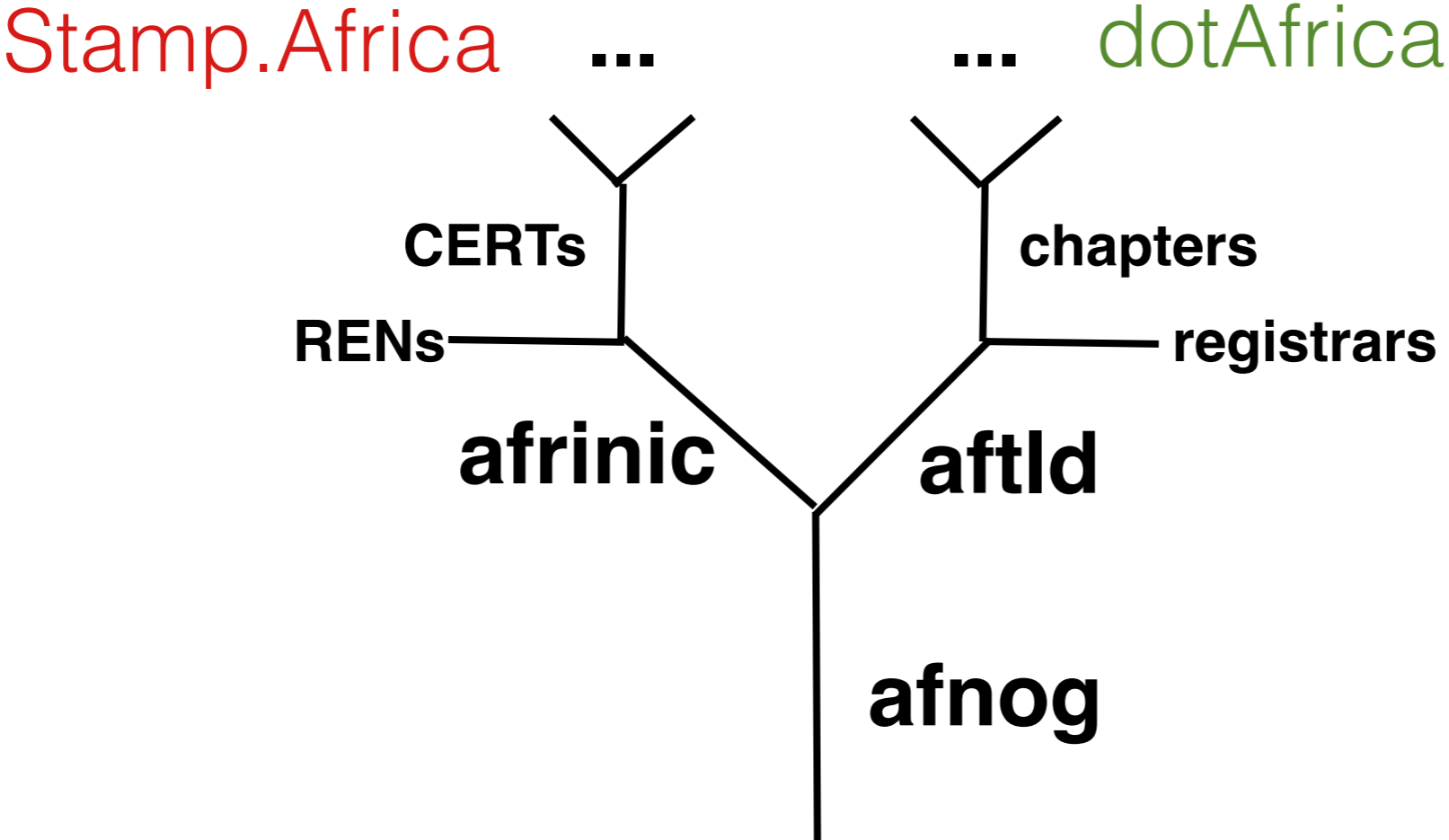
- Merchant payment services
- Redemption exchange centers
- API for token programming

# Deployment vehicle

- A start up “Not for profit” regional organization
- Join the Internet technical institutions, Af\*
- Profit to support development of internet in Africa
- Initial Coin Offering



# How Af\*, technical communities grew



# Conclusion

- Stamp.Africa builds trust in the DNS ecosystem in Africa by giving reward to registrants for following a practice (BCP)
- Makes domain name transactions efficient and with lower fees
- No need for Registrar to put money at Registry (all transactions come with token)
- Stamp.Africa starts signing agreements with interested registries, registrars and DNS technical service providers at AIS Dakar May 2018 to roll out stamp.africa

Thank you