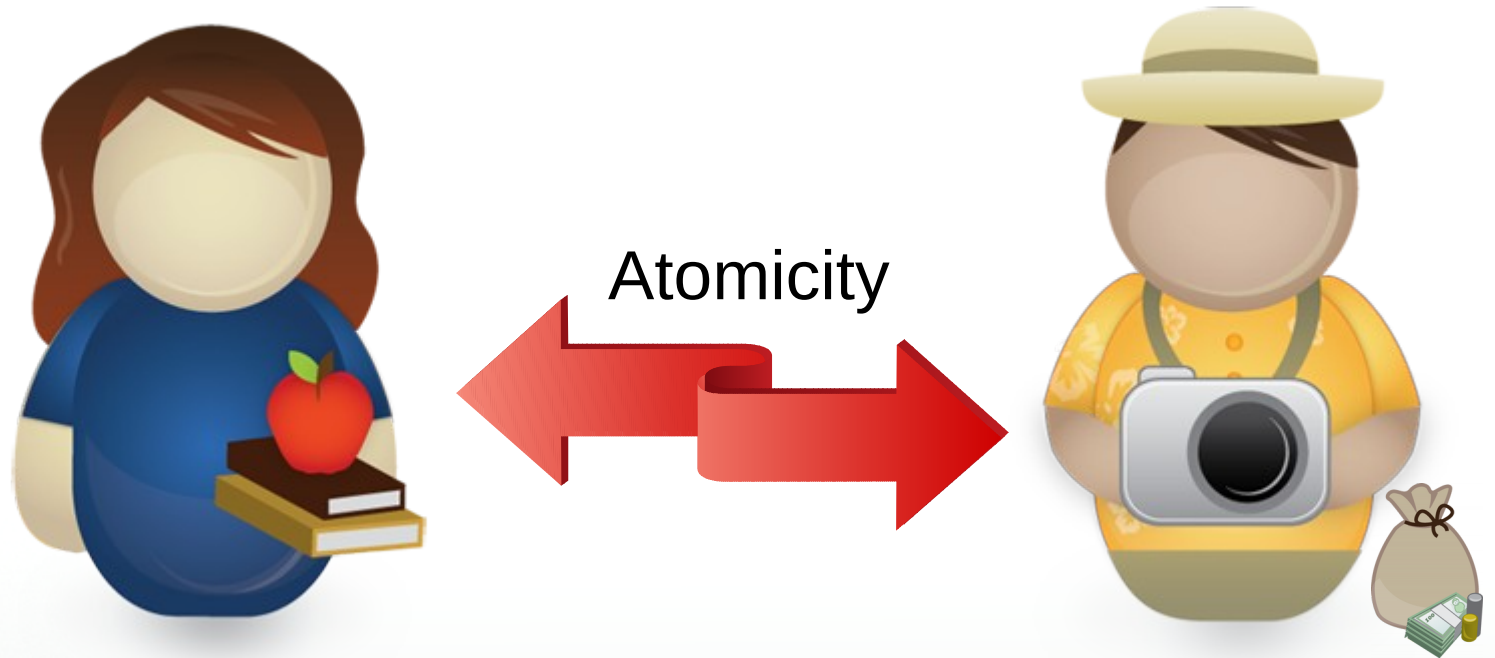


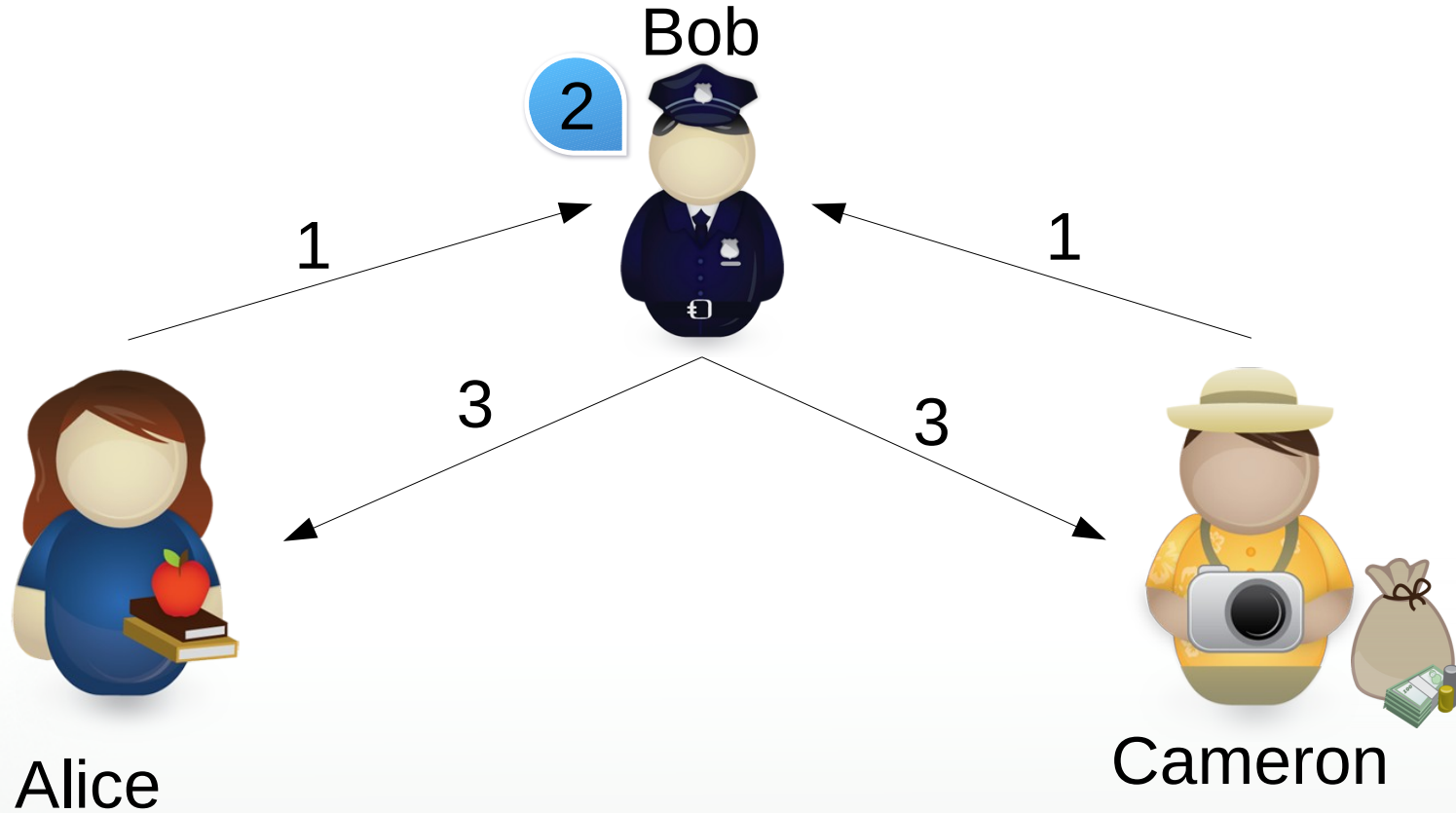
Interplanetary Smart City (IPSC)



Physical Asset Trade



Digital Asset Trade on the Internet

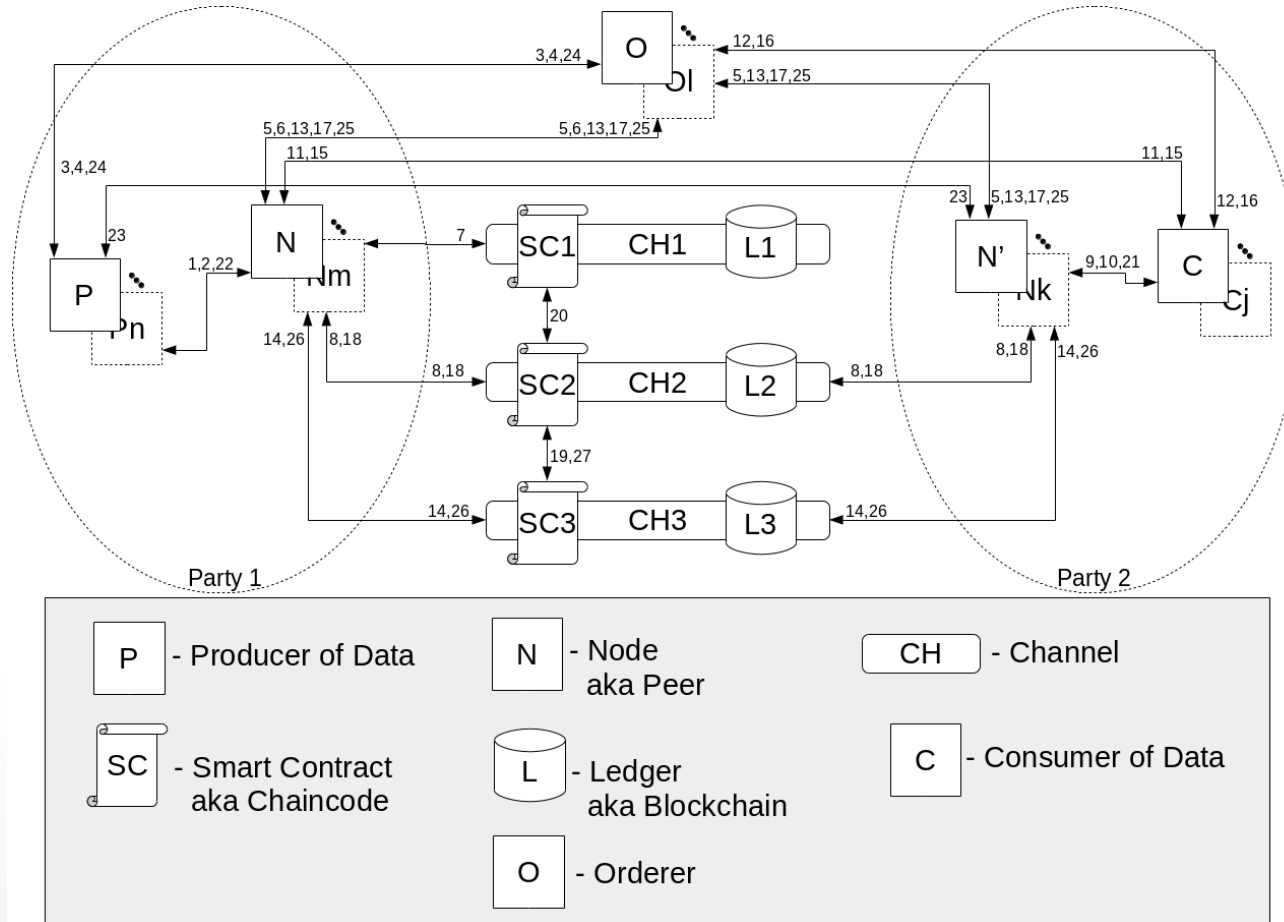




IPSC Data Exchange Requirements

- Secure – strong cryptography
- Robust – decentralised
- Scalable – P2P and microservices
- Accountable – temper prove log
- Space Aware – Organisation structures
- No trusted third party – private blockchain technology

IPSC Architecture



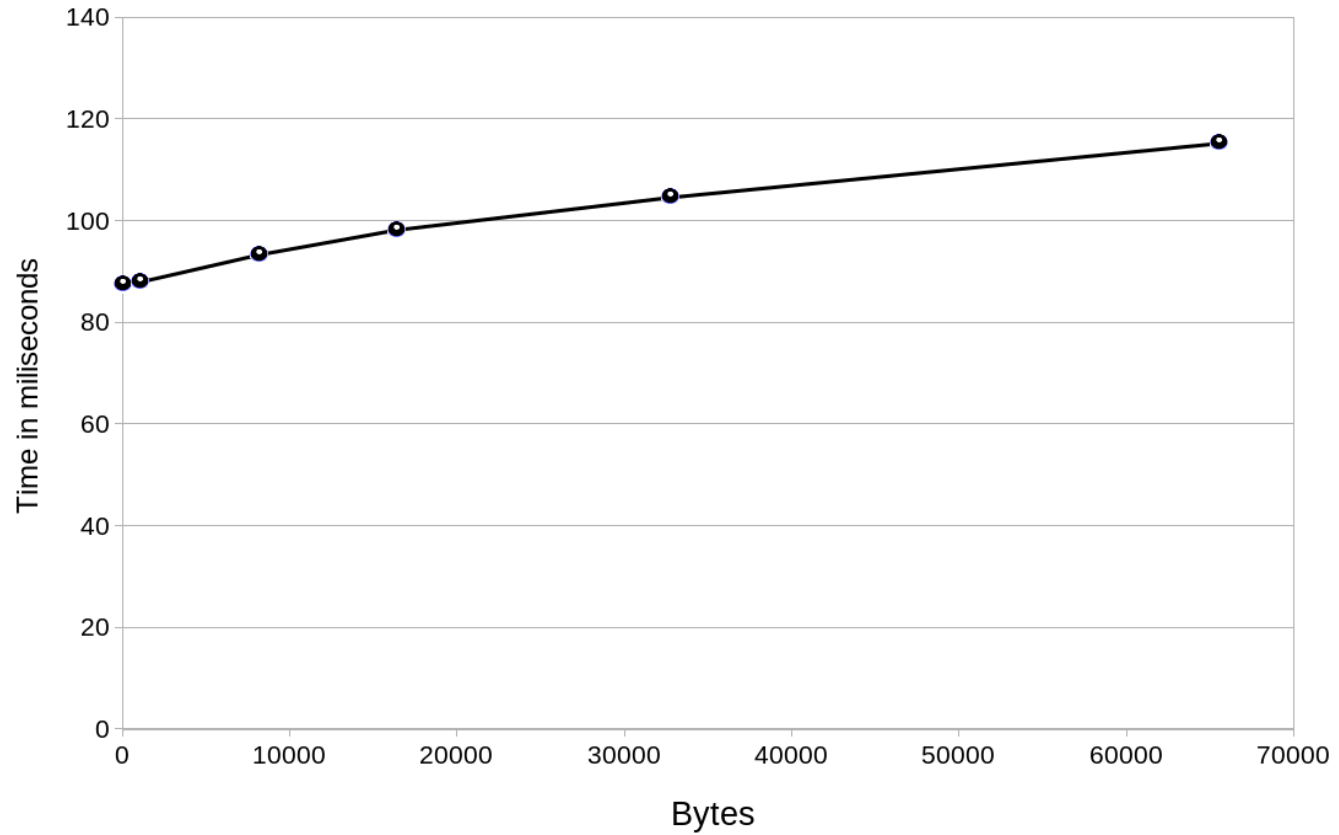


Game Theoretical Analysis

| | Party 1 reveals Data | Party1 does not reveal Data |
|----------------------|---|---|
| Party 2 waits | Party 2 \ Party 1 data \ promise of tokens | Party 2 \ Party 1 no data \ no promise of tokens |

| | Party 2 releases Tokens | Party 2 does not release Tokens |
|----------------------|--|--|
| Party 1 waits | Party 1 \ Party 2 tokens available \ future trade available | Party 1 \ Party 2 no tokens \ no future trade |

Statistical Performance Analysis





Testing

- `chaincode_data.go` – 84.6%
- `chaincode_tokens.go` – 71.2%
- `chaincode_ad.go` – 66.3%
- Unit Tests + Scenarios