



Architecture Working Group Belgium-Luxembourg
Meeting of September 9, 2016

Blockchain Technologies

Sponsors

KBC Bank & Insurance – Venue
Cronos Belgium - Catering



What is GSE (Architecture Working Group)?



<http://www.gse.org/>

<http://gsebelux.com/>

- Formed by the merger of **G.U.I.D.E. and SHARE Europe** - both well established **users organisations** with over 35 years of experience each
- Effective **forum** supporting the needs of today's ICT professional
- **Non-profit association** of companies, organisations and individuals who are involved in ICT solutions having a link with IBM architectures
- GSE aims to encourage members to **exchange experience and information** related to ICT, **influence** ICT product and service providers, and influence the European standards in ICT in the interest of its members
- GSE is an **independent organisation** led by **volunteers**
- Active member participation is encouraged and fostered by providing numerous opportunities to **share ideas and solutions with industry colleagues**, both on a **regional and international** level

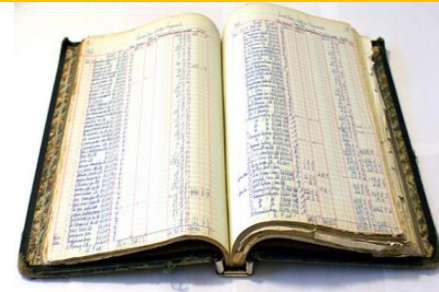
Blockchain is an (1) Electronic, (2) Distributed, (3) Replicated, (4) Decentralized **Ledger**

- **Ledger** is THE system of record for a business
 - Records asset transfer between participants
- A business will have multiple ledgers for multiple business networks in which they participate...hence may be “peers” in *multiple blockchains*.....

The “Block” is an executed & verified transaction



The “Chain” is the Ledger (book of record for all transactions)



Inspiring Use Case – Aircraft Maintenance

What?

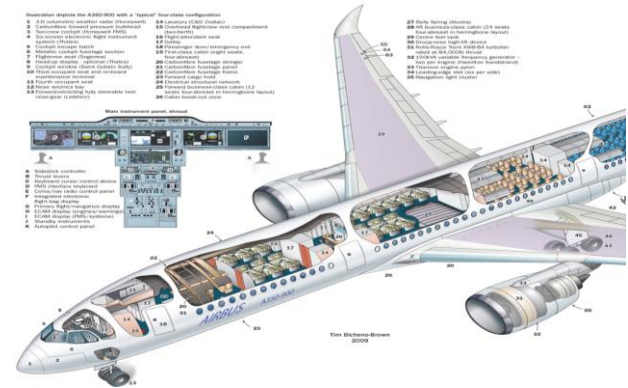
- **Provenance** of each component part in complex system hard to track
- Manufacturer, production date, batch and even the manufacturing machine program.

How?

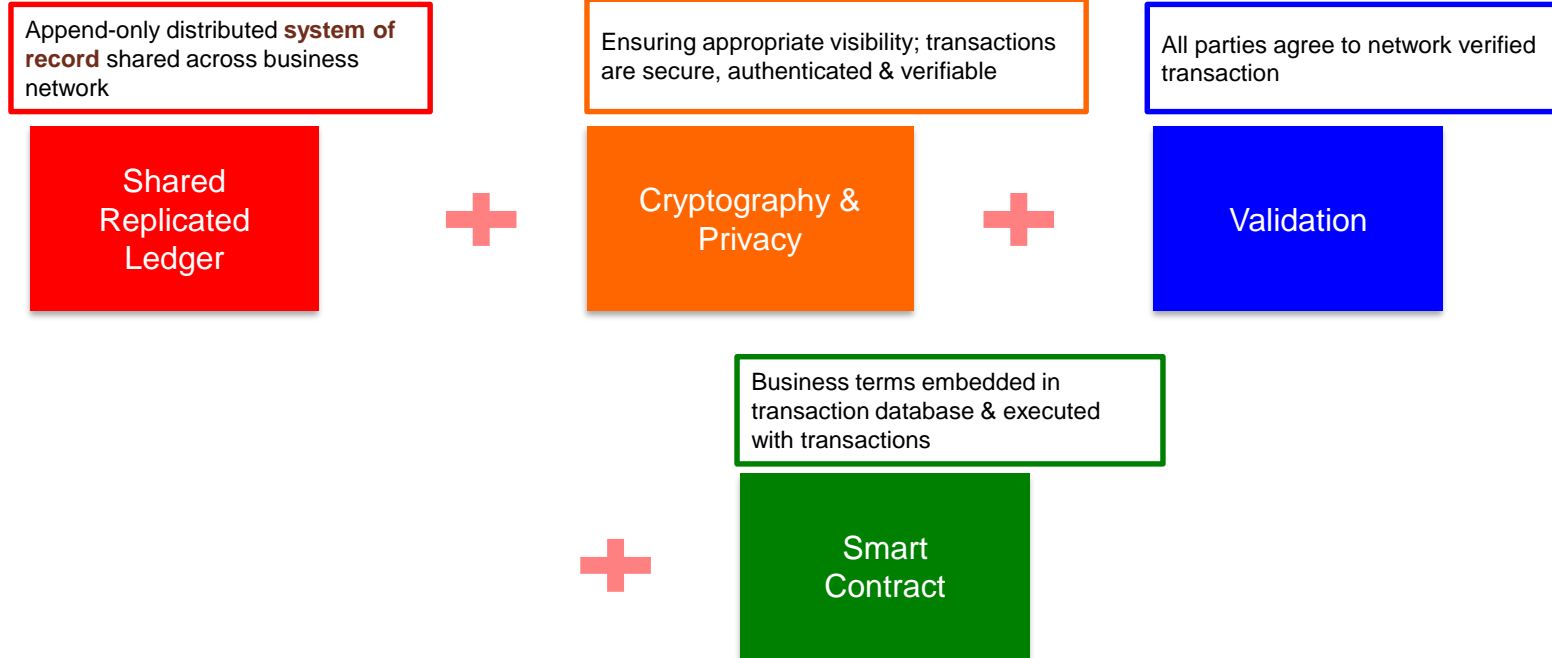
- Blockchain holds complete provenance details of each component part
- **Accessible by each manufacturer** in the production process, the aircraft owners, maintainers and government regulators.

Benefits

1. Trust increased because no authority "owns" provenance
2. Improvement in system utilization
3. Recalls "specific" rather than cross fleet



Blockchain in a Nutshell



Broader participation, lower cost, increased efficiency

An explosion of potential Use Cases...

- Financial Services

- Securities
 - Post-trade settlement
 - Derivative contracts
 - Securities issuance
 - Collateral management
- Trade Finance
 - Bill of Lading
 - Cross-currency payment
- Syndicated Loans
- Intra-bank settlement
- Retail Banking
 - Cross border remittances
 - Mortgage verification
 - Mortgage contracts (smart contract)

- Public Records

- Real estate records
- Vehicle registrations
- Business license and ownership records

- **Broad Industry Applicability !!!**

- Open & Trusted Supply Chain
- B2B Contracts
- On-Line Gaming
- Internet of Things
 - Smart appliances
 - As much as you can imagine...
- Aircraft Maintenance Tracking
- Anything to do with Provenance
 - Manufacturing

Agenda for Today

- 09:00 – 09:30 hrs.: **Welcome Coffee**
 - Offered by Cronos Belgium
- 09:30 – 09:45 hrs.: **GSE and the Theme of Today**
 - Eric Michiels, Liaison of the GSE Architecture Working Group
- 09:45 – 10:45 hrs.: **Introduction to Blockchain and a practical hands-on with Multichain & Hyperledger**
 - Roderik van der Veer, CTO SettleMint
- 10:45 – 11:00 hrs.: **Coffee break**
 - Offered by Cronos Belgium
- 11:00 – 12:00 hrs.: **Innovation with Blockchain Technologies**
 - Antony O'Dowd, Senior Technical Staff Member, Blockchain Labs, IBM Hursley
- 12:00 – 12:45 hrs.: **Blockchain Initiatives at KBC Bank and Insurance**
 - Koen Vingerhoets, Blockchain Advisor, KBC Belgium
- 12:45 – 14:00 hrs.: **Networking Drink**
 - Offered by Cronos Belgium



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*Enjoy **YOUR** meeting !*

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