Data Services
Inventory Matching and Automated Settlement

GSMA Service Showcase Live
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Challenges in Data Services

### Current Challenges
- Increasing inter-ISP buying/selling relations
- Multiple sources of truth (each partners keeps own transaction records)
- Emerging traffic types
- Legacy IT
- Little trust
- No master data model tying together commercial and operational processes
- Differing standards
- Proprietary IT

### Pain Points
- Significant manual work
- Data quality issues > invoicing errors > disputes > more manual work
- Lost deals > less revenue
- Long response and/or processing times
- Inefficiencies & waste of FTE
- Unpaid invoices > suboptimal cash flow

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*SOAM = Service Operations, Administration and Maintenance*
Innovation Approach

- Collaborated network of Carriers with support from vendors and industry bodies. Start small, grow into production early, learn, extend network, add use cases.

- Create a blockchain shared service repository as a single source of truth.

- Use smart contracts to enforce commercial agreements and drive automation.

- Collaborate with industry bodies (GSMA, MEF, TM Forum, CBAN, etc.) to thrive standardization and thrive adoption.
Data Services Lifecycle & Focus

Overview

- **Current** – manual extraction of active services; bi-directional matching records; undisputed billing statement; mismatch segmentation
- **Scope** – automated extraction of active services, bi-directional matching records; undisputed billing statement; AI mismatch reconciliation

### CPQ
- Inquiry
- Decomposition
- External quote
- Internal quote
- Recomposition
- Mark-up
- Response

### Order
- Receipt
- Reserve internal resources
- External Order
- Accept/Decline

### Delivery
- Receive external confirmation
- Internal delivery
- E2E Orchestration
- Update Repository
- Manage Repository

### SOAM
- Fault management
- Performance Reporting
- SLA reinforcement
- Service Credits management

### Settlement & Booking
- Prepare billing statement
- Send invoice
- Receive invoice
- Dispute management and reconciliation
- Netting
- Settlement

Index:
- In progress @CBAN Wholesale Data Supply Chain Management
- In progress @MEF Sonata API development and PoCs
- In progress @CBAN Wholesale Voice Settlement and @GSMA Wholesale Roaming Settlement
Update & Manage Repository: Inventory Matching & Mismatch Handling

Operator 1

Report of all currently active services with Operator 2

Matched
Partial Match
Mismatch

Operator 2

Report of all currently active services with Operator 1

Matched
Partial Match
Mismatch

AI and GUI assisted
Generation of Billing Statements

Operator 1
- Report of all currently active services with Operator 2

Operator 2
- Report of all currently active services with Operator 1

Matched
- Partial Match
- Mismatch

Billing Statement
- *Statement ID
- *Statement ID
Frictionless Invoicing and Settlement
Target Outcome

Report of all currently active services with Operator 2

Report of all currently active services with Operator 1

Matched
Partial Match
Mismatch

Matched
Partial Match
Mismatch

AI and GUI assisted

Billing Statement *Statement ID

Invoice *Statement ID

Invoice *Statement ID

A = API
Network Setup & Benefits

Current Network Setup

Benefits Achieved

- Aligned inventory & one source of truth: Auditable by tax authorities, regulators etc.
- Significant reduction of manual work: inventory, disputes, alignments …
- Shorter processing times e.g. for RFPs
- Optimized cashflow
- Better supplier & customer relationships
- Less cost, higher revenues, better cashflow

= Blockchain Node