UNIFORM ECONOMIC TRANSACTION PROTOCOL

"Payments and transactions – several perspectives"
Utrecht, February 2nd, 2015

Presentation given by FOCAFET
For **O**pen **C**onvenient **A**nd **F**air **E**conomic **T**ransactions

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W3C WORLD WIDE WEB consortium

Who I am and what I do

Who I am

Floris Kleemans
1971
Dutch, Married (with Italian wife)
Father of daughter (7) and sons (5 and 2)
MSc. General Economics, Groningen University

What I did / do

Group Head of Strategy

FOCAFET

Co-founder

Founder / CEO

What is a transaction / What is a payment?

Identification and Authentication

Data Management and Privacy

Delivery, Billing and Shipping

Taxation

ERP, Ledger and Information

Payment Clearing and Settlement

Conditions and Escrow Management

Authorisation, Monitoring and Control

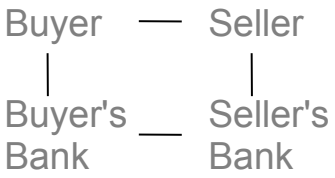
These services or processes make up for the bulk of all what we refer to as (economic) transactions

From 'separate systems' to one 'group chat'

Traditional transactions

Several segregated two, three and four corner models

Payment



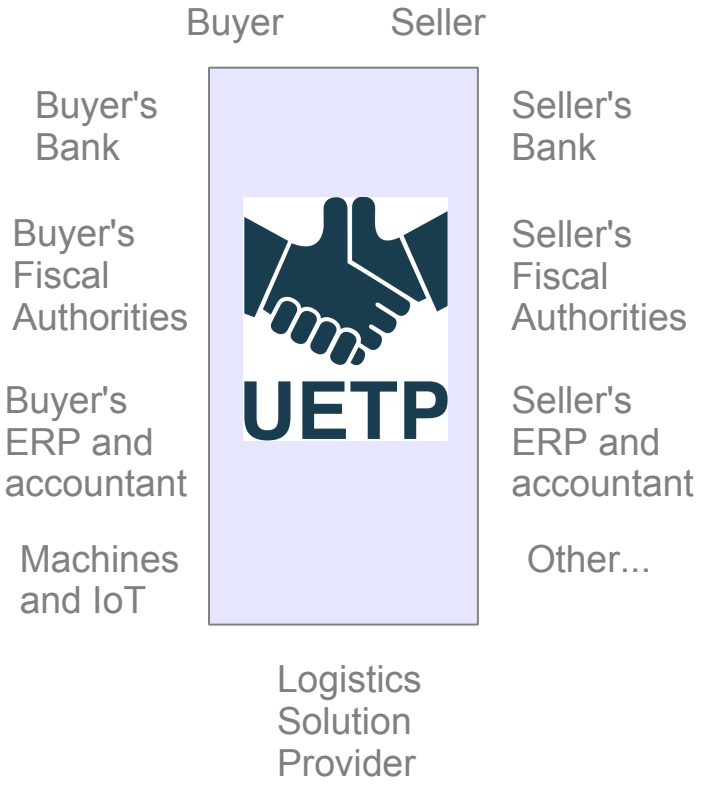
Delivery

Taxation

Etc., etc.

UETP transactions

The n-party “group chat”



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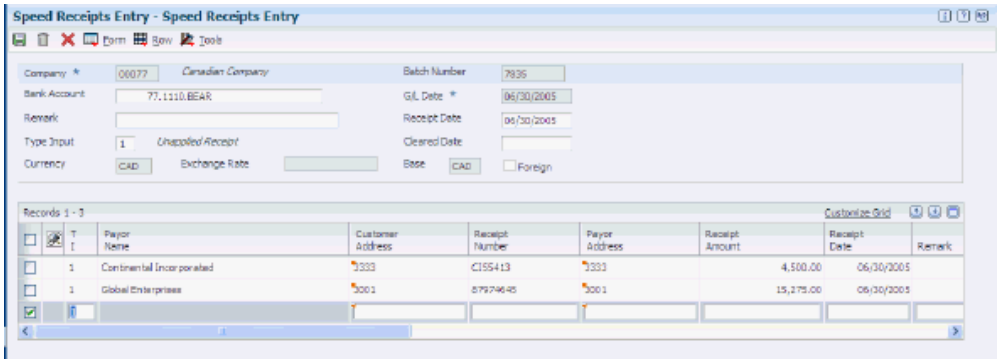
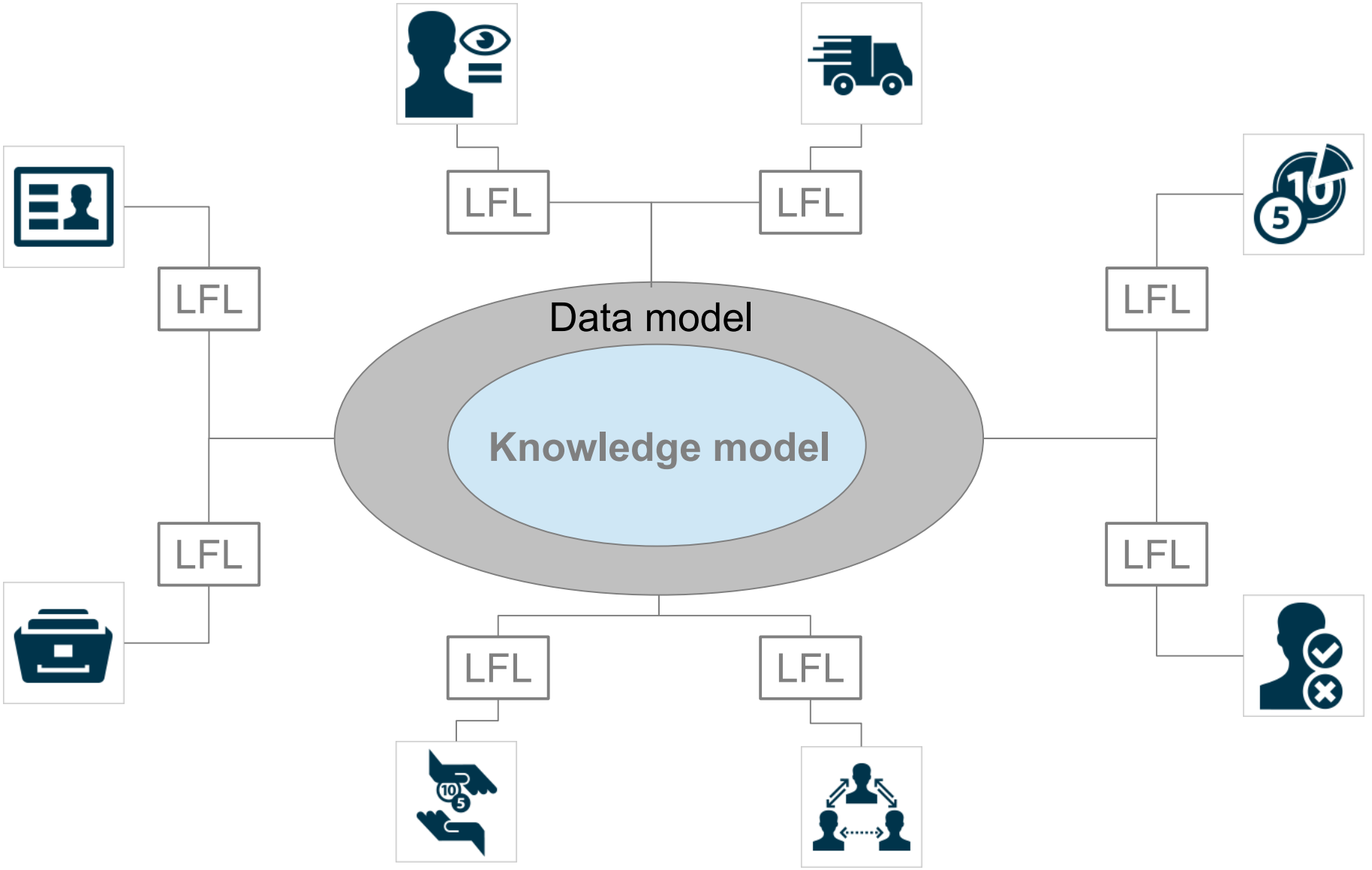
Saying the same things in a billion different ways

Domain	Type of information	Example
Who	Buyer and seller information	Identities and preferences
What	Product / service information	HS (product) codes
How much	(Counter)value information	Amount and currency
When	Date, time and timezone	Date / time stamp
Where	Place(s) and jurisdiction(s)	Geo-, country codes
How	Contractual information	Sales, labour, investment
Other	Other information	Manuals, promotions, ...



Knowledge model takes centre stage



*LFL stands for Local Flavour Layer

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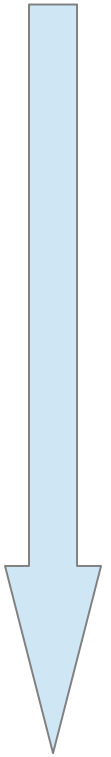
Becoming aware of economic evolution

Evolutionary focus	Time (in years)	Relevant space	Interdependence
Hunter gatherer	40,000	Family / tribe	Very few actors and things
Farming	4,000	Village / city	Few actors and things
Industrial	400	Nation / state	Many actors and things
Information age	40	Global	Global actors and things



Interdependence on everyone and everything.
Is this the purpose of economic evolution?

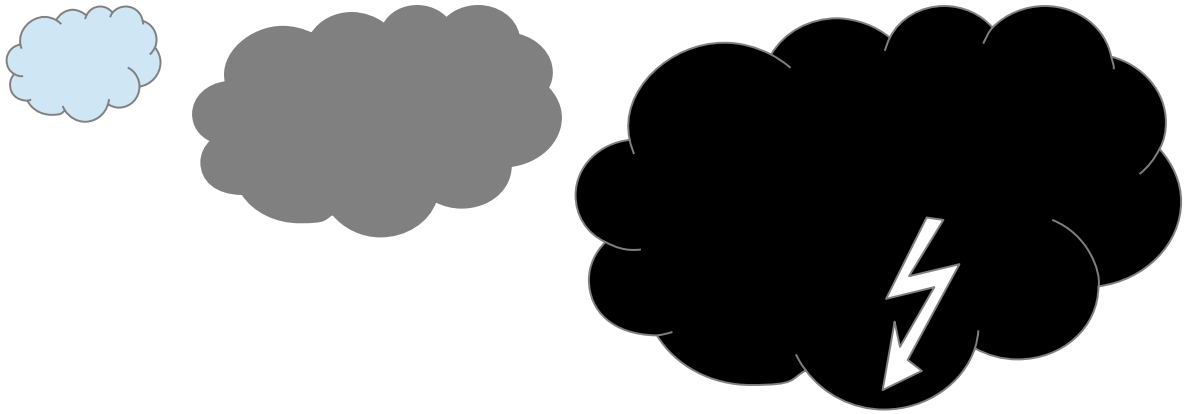
Maximum (economic) output hypothesis

"Maximum (economic) output is achieved when everyone and everything is optimally (economically) involved with its most unique talents and characteristics"

"It is here, where full self potential and full collective potential are aligned. It is here where self purpose and collective purpose coincide"

"What is keeping us from reaching this state, is fully **aligned connectivity**"

Why do we need UETP? – Two colliding worlds

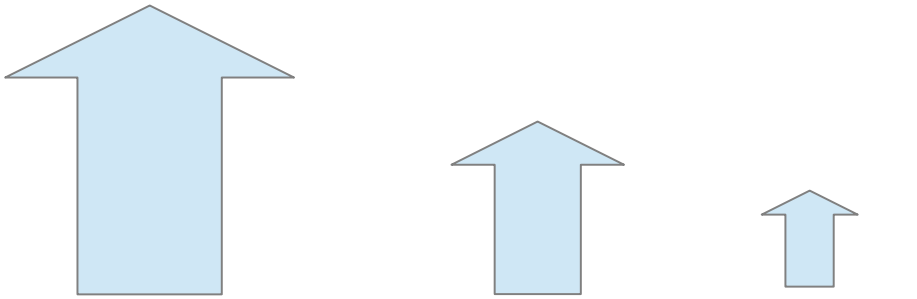


Growing number of rules, guidelines, policies and data formats over time

2000 2007 2015

vs.

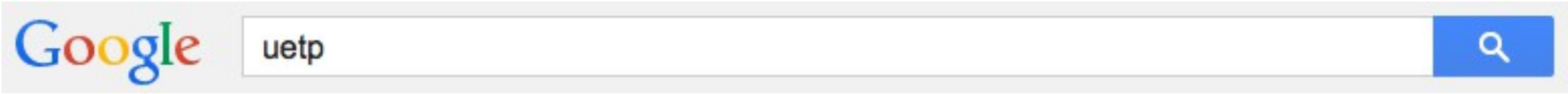
Relationships in global growth, with increasing number of exchanges and data points in transactions



Economic growth becomes more transaction intensive. Meanwhile, data formats for these transactions grow too. This will lead to exponential growth of costs.

Why do we need UETP? – HTTP vs UETP

HTTP is written for specific applications on specific servers. The search query for 'UETP' with Google and Yahoo yielded the following in my browser:



https://www.google.com/search?q=uetp&ie=utf-8&oe=utf-8&rls=org.mozilla:en-US:official&client=firefox-a&channel=sb&gfe_rd=cr&ei=HCFNVMm7G-eK8QefmYH4CA&gws_rd=cr&fg=1#rls=org.mozilla:en-US:official&channel=sb&q=uetp

https://search.yahoo.com/search;_ylt=A0SO803tJU1UqzIAh4RXNyoA;_ylc=X1MDMjc2NjY3OQRfcgMyBGZyA3lmcC10LTMyNS1zBGdwcmlkAwRuX3JzbHQDMARuX3N1Z2cDMARvcmlnaW4Dc2VhcmNoLnlhaG9vLmNvbQRwb3MDMARwcXN0cgMEcHFzdHJsAwRxc3RybAM0BHF1ZXJ5A3VldHAEdF9zdG1wAzE0MTQzNDIxNjE-?p=uetp&fr2=sb-top-search&fr=yfp-t-325-s&fp=1

With UETP, one request instruction can be interpreted and executed to all parties simultaneously that accept to work with UETP. Together they can process transactions in real time.

Standardisation old style versus new style

Old style standardisation	New style standardisation
Closed discussion	Open discussion
Not-continuous	Continuous
Formal communications	Real time dynamics
Imposed, standard to value	Voluntary, value to standard
Enforced from the top down	Constructed from bottom up
Political, formal	Consensus, organic
Slow turn around	Fast turn around
Fragmented	Global
Weaker network effects	Stronger network effects
Little enforcement means	Transaction certification

With UETP, we set a time line for a goal, get input from various good practices and vote. Semantically, there is no duplication and from a broad functional base, we can support most existing standards

Why UETP? – Different reasons, depending on users

"Things have become so much more efficient."

"Insourcing and outsourcing has become so much easier."

"Substantial savings in working capital."

"I increasingly buy things from companies I did not even know existed."

"Creating partnerships in real time."

"No more tax filing. Taxes can be paid automatically."

"Finally, ownership and control over the data that I generate."

"Real time compliancy assurance, provides so much comfort."

"It enables me do to everything in real time."

UETP, like any language, has different benefits for different users in different situations.

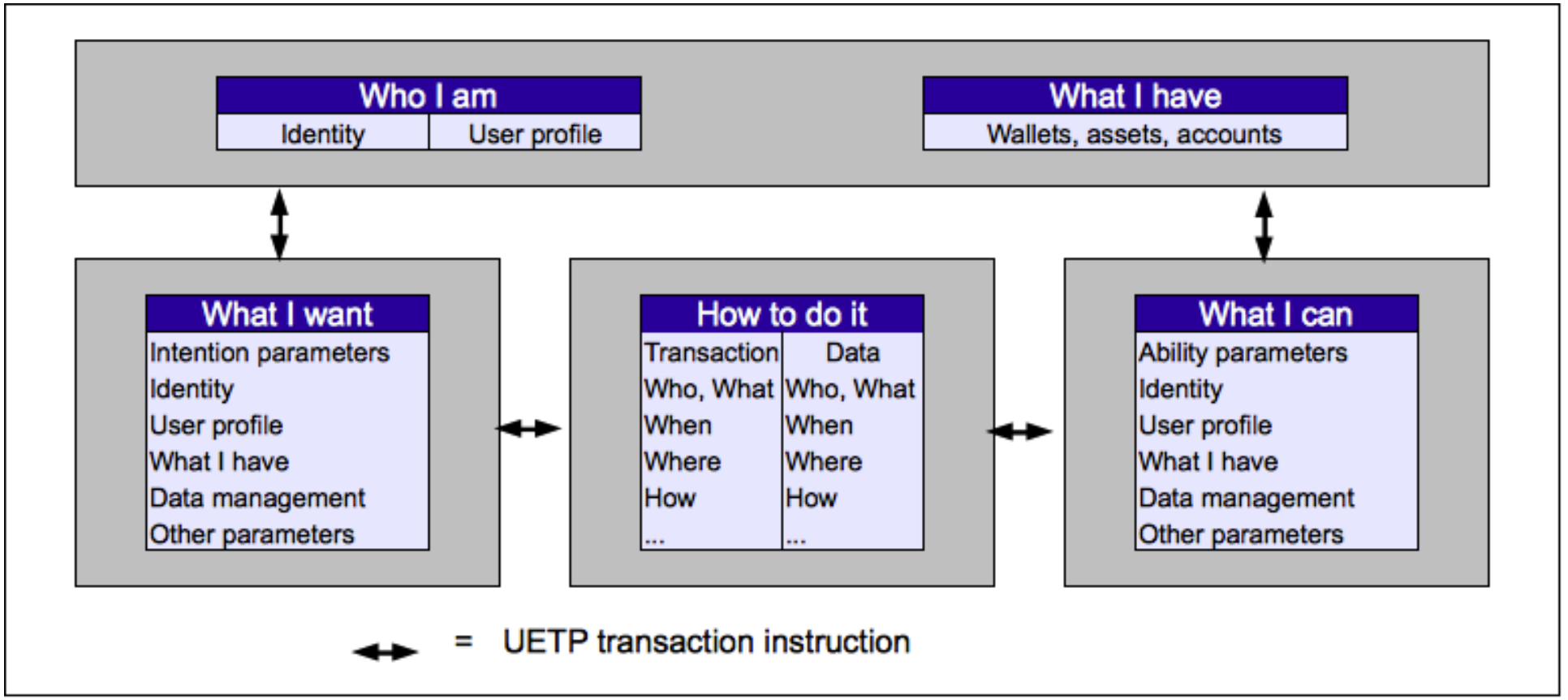
UETP – Why something similar doesn't exist yet

- We are becoming more aware of the issues at stake
- Most parties have been pursuing own interests in standards
- Most initiatives have not been holistic in nature
- Technically, it exists, except for that solutions are not aligned
- Other initiatives have been ahead of their times
- Other initiatives were not free to use or openly accessible
- Governance so far not federated and decentralised enough
- Not sufficient network effects in other initiatives
- We have focused on data rather than on knowledge sharing

What is UETP?

- It's all about agreement on semantics and formats ...
- … and defining services and processes in transactions
- The need for an integrated ecosystem
- How ecosystem users communicate with each other

It's all about agreement on semantics and formats ...



The global ability to communicate with the most important verbs and interrogatives: to be, to have, to do, to want, to can and who, what, when, where, why, how, etc.

The need for an integrated ecosystem

UETP will cover the entire economic transaction ecosystem

Identification and authentication

Identification schemes
Fraud detection
Biometrics

Data management and privacy

Buyers, sellers
Users
Data brokers

Delivery, billing and shipping

Postal and
logistics services

Taxation

Fiscal authorities
Revenue services

Accountants
Supply chain partners
Other reporting

ERP, ledger and information

Banks
Payment services
Clearing

Payment, clearing and settlement

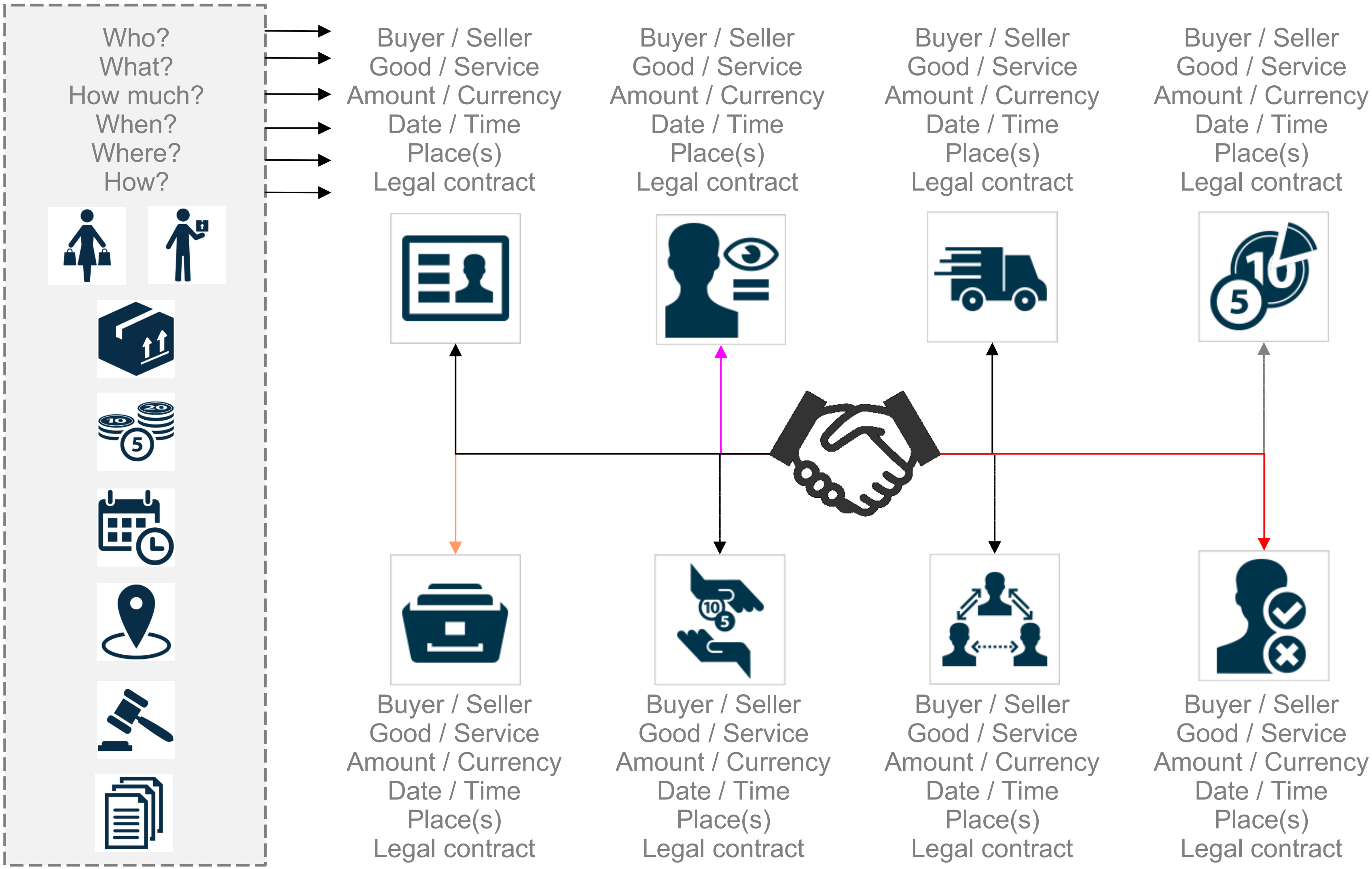
Public notary
Escrow services

Conditions and escrow management

Government
Organizations
Social clubs
Family & friends

Authorization, monitoring and control

How ecosystem users communicate with each other



Transaction services almost all use similar data, though they do use different instructions, formats and procedures

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How will UETP be realised?

- How will UETP be realised? – Objectives
- How will UETP be realised? - Strategy
- Roadmap – UETP operational pilot
- When
- Who
- Where
- How

How will UETP be realised? – Objectives

Buyer / Seller
Good / Service
Amount / Currency
Date / Time
Place(s)
Legal contract

1. Request for transaction

10. Response to request

2. Identification, authentication and biometrics

3. Data management and disclosure

4. Delivery, billing and shipping

5. Tax payment and receipt

- **A uniform way to define and describe transactions and instructions**
- **A uniform way to process economic transactions**
- **Norms for a safe, secure and well-functioning infrastructure**
- **An open, federated, decentralised and organically transformative governance structure**

9. ERP, ledger and information

8. Payment, clearing and settlement

7. Conditions and escrow management

6. Authorization, monitoring and control

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Major improvements in STP, risk and compliancy

- Parties and applications work with same information
- No more translation differences
- Improvements in client privacy and data management
- Higher STP inside and outside the organisation
- Real time consent of all parties involved in transaction
- Minimising risks of partially processed transactions
- Supervisors and regulators have same information at same time

How will UETP be realised? – Strategy

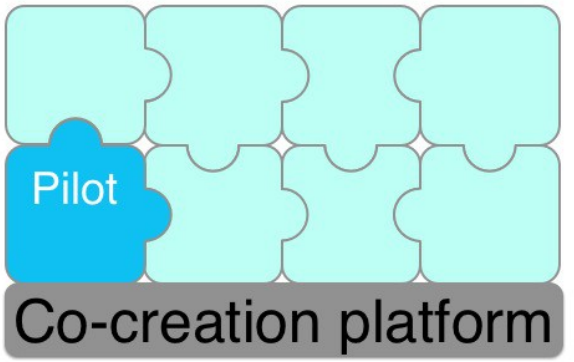
Mobilize and build co-creation platform

Global, multi-party co-creation platform representing interests of key stakeholder groups in the global transaction ecosystem.

Deliver a pilot to prove value of UETP

The value, usage and workings of UETP are demonstrated by connecting to existing international transaction initiatives and leveraging both existing and emerging standards from partners.

Create common language and embed in daily use



Setting up and maintaining an ecosystem which establishes uniform and accepted data definitions, standards and protocols, which can be used by al.

Roadmap – example of a UETP operational pilot

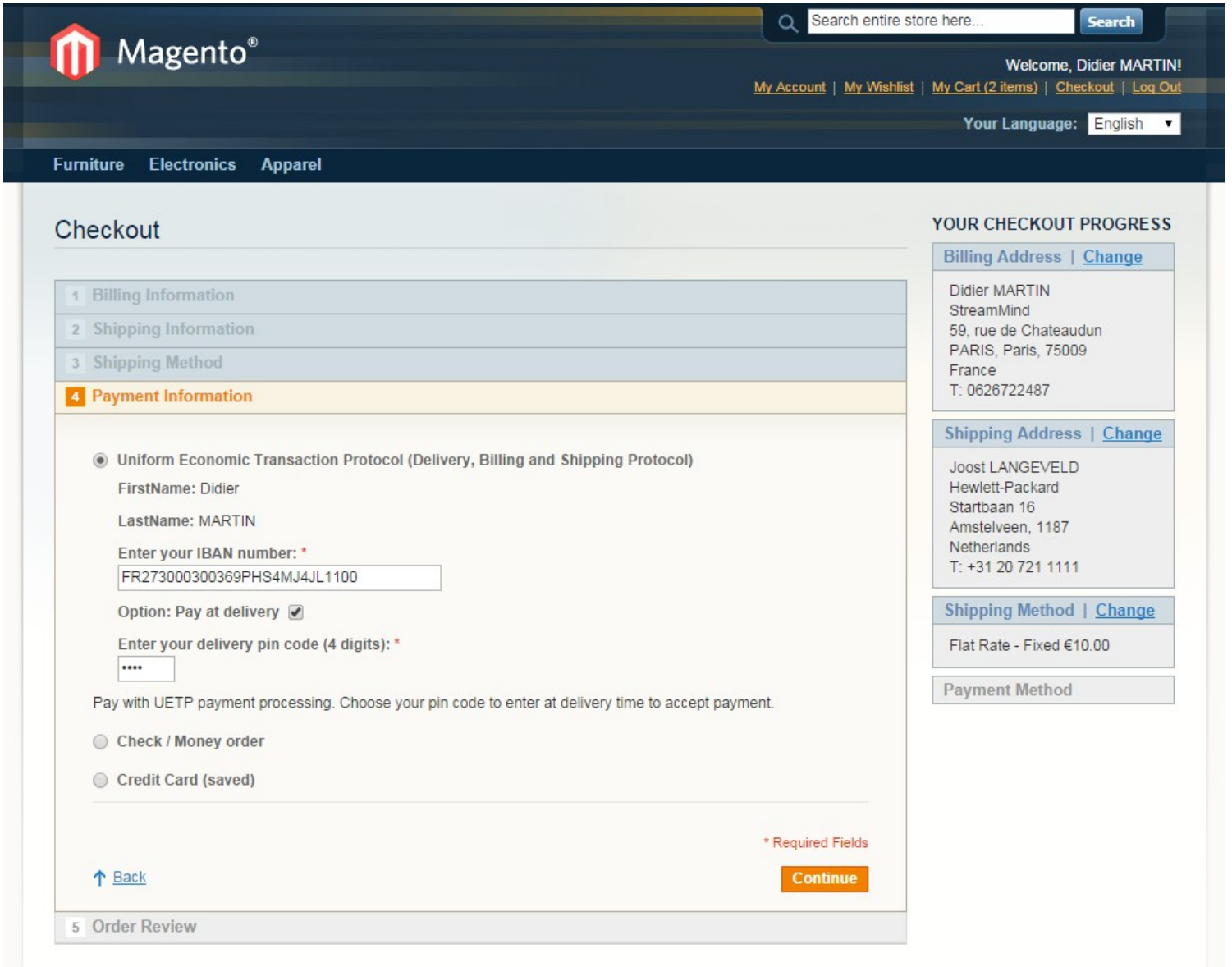
UETP value proposition pilots are built. We use input to create UETP.

In co-development with HP and Stream Mind, the following functionalities went live in production in 3Q2014:

Based on approved underlying infrastructure and technology

SEPA payments
e-billing / e-invoicing
Delivery confirmation
eCommerce (Magento) connectivity
Interfacing for logistics, banks and consumers

✓



A screenshot from the live pilot production environment

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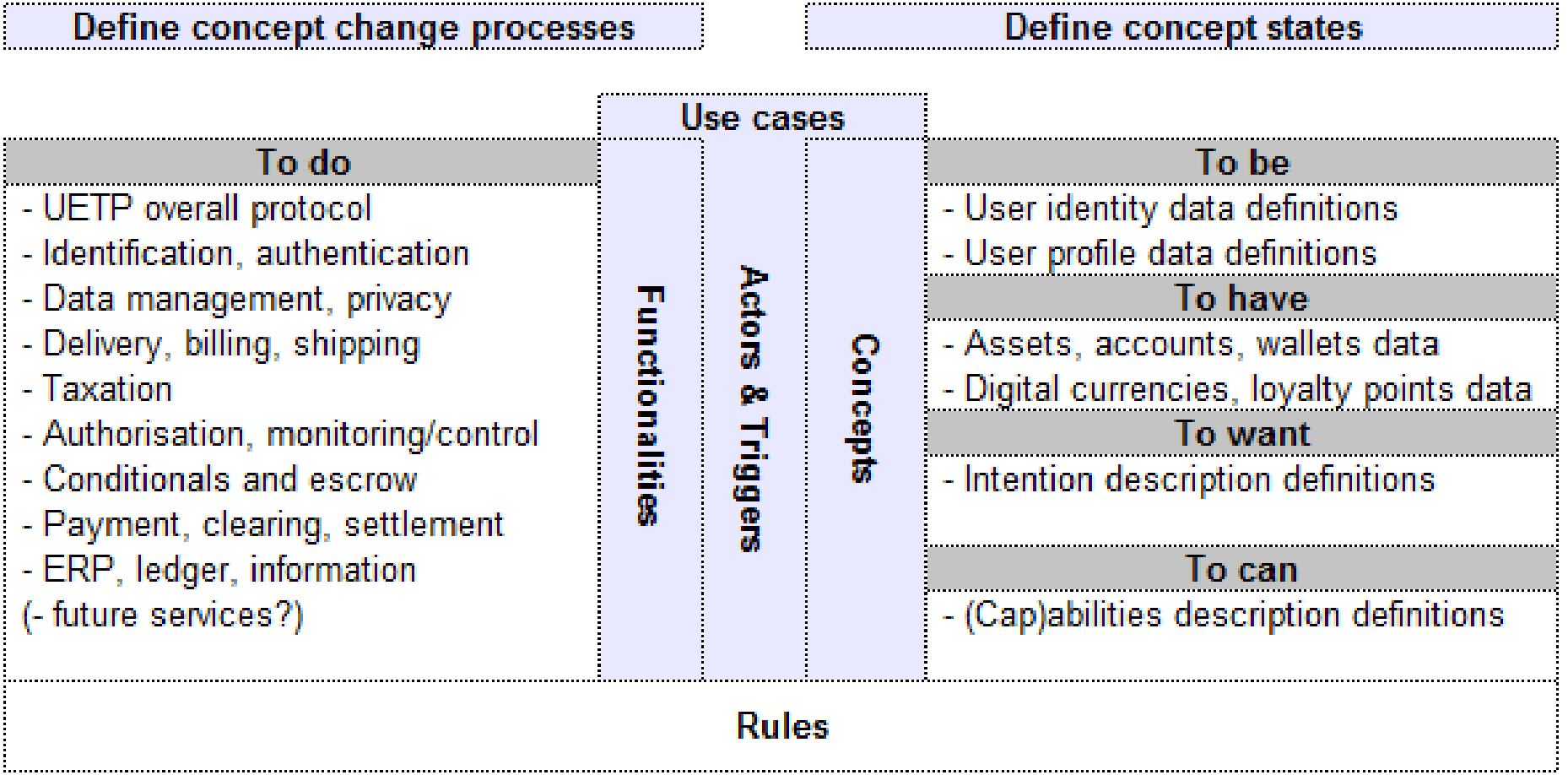
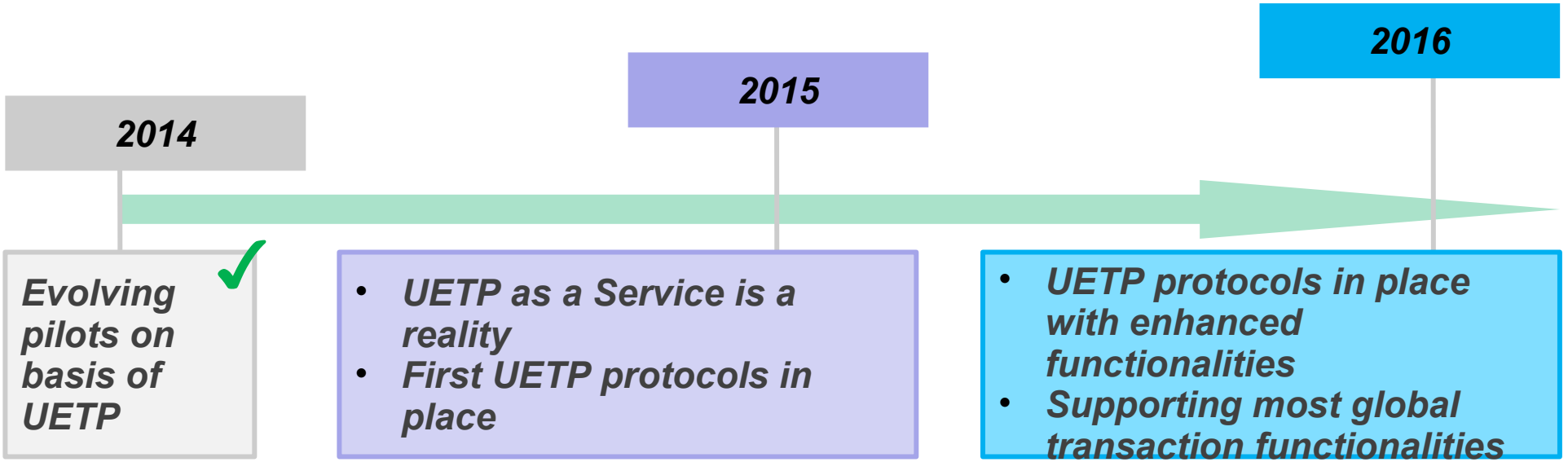
Knowledge model: Unique and dynamic concepts



The co-creation platform produces community supported consistent use cases.
The use cases are used as input to develop the protocols and data code sets.

Roadmap - When



FOCAFET – Foundation facilitating the UETP initiative

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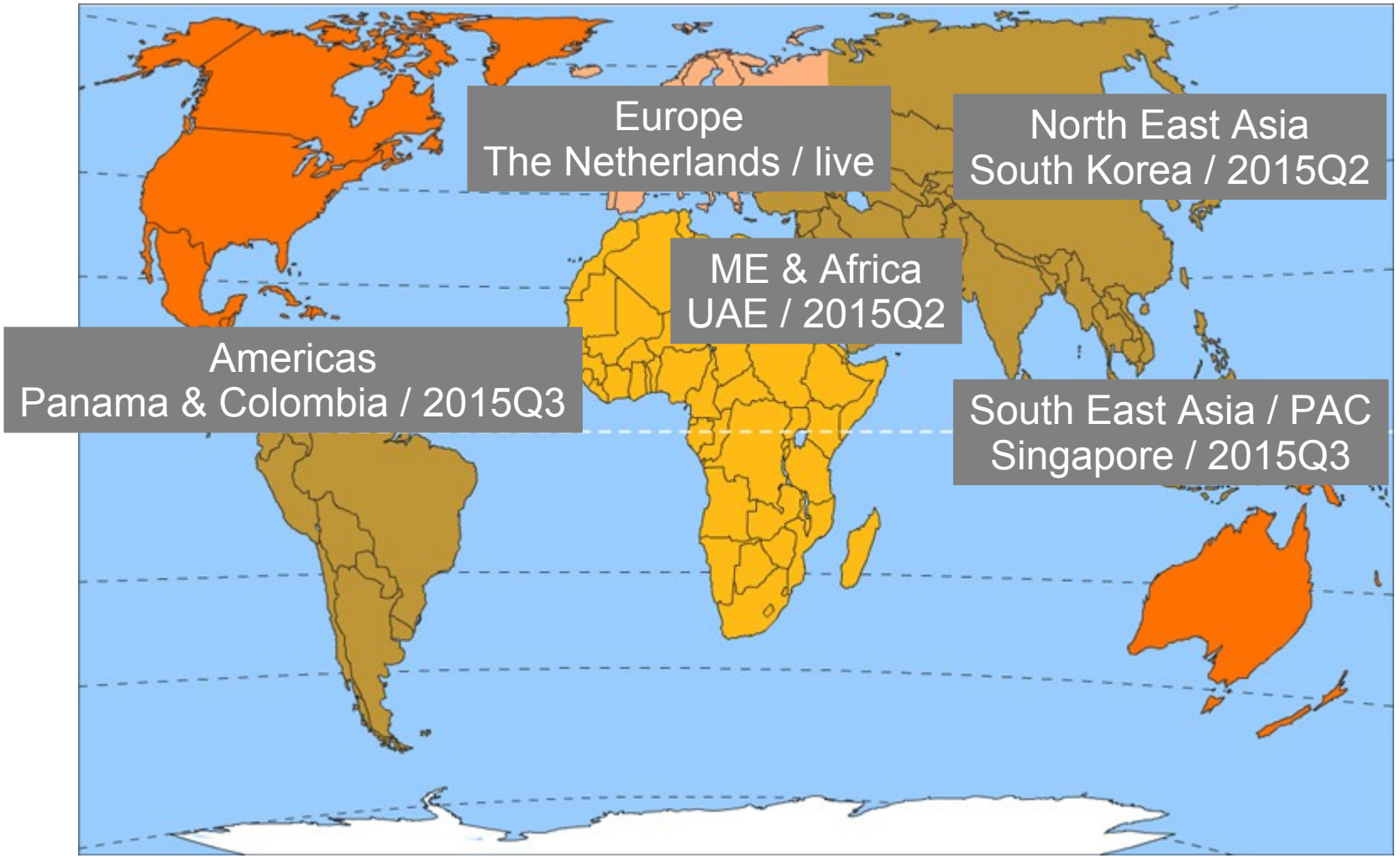
- Adheres to "This is for everyone" - principle (internet way)
- UETP protocol is free to use
- Non-profit foundation, no direct benefits to management
- Facilitates open, federated, decentralised governance models
- Is transparent and organically transformative
- Facilitates open source, royalty free, patent free co-creation
- By design, no third party trust required
- By design, no role in transaction execution
- Intends to minimise itself, avoiding power creation

Already strong ecosystem support

- Globally leading technology and data enterprises
- Financial industry players within Europe, increasingly outside Europe.
- Globally leading consultancy firms
- Open source, blockchain and Bitcoin-like communities
- Telcos and hardware enterprises
- Other industries
- SME interest groups
- Consumer interest groups
- Increasing interest from (various) governments, regulators and supervisors across all continents

Foundation with regional hubs



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From creation to implementation

Co-creation platform

Societal discussions and decisions on functionalities, customer journeys, use cases and data definitions.

Data code sets development

Data definitions with open source translation in natural languages.

Data code sets repository

Real time repository. Available to check consistency of applied data in transactions.

Protocol development

Input used from co-creation platform to develop protocols.

Protocol repository

Real time repository.

Why UETP will be successful

- Easily and intuitively understood
- UETP protocol is free to use
- Already critical committed ecosystem for network effects
- Right timing, need for standardisation is high
- Full time and sufficient resource availability
- Scope and scalability
- Open to integration of existing standards and practices
- Open, decentralised, federated and organically transformative governance

UETP and W3C Payments

- Complimentary worlds in front end and back end
- Use cases W3C Payments to be embedded in UETP knowledge model and data models
- Open model / interactions
- Possible bridge function PSD2 / bank APIs
- Possible bridge supply chain / ERP suppliers
- Possible bridge government / supervisors / fiscal authorities
- W3C enabling web / app / browser interfacing of UETP
- Open to integration of existing standards and practices

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LET'S MAKE THIS WORK TOGETHER