

*Trusted Identities
That Drive
Global Commerce*



Putting the Trust in eIdentity

Evolution, not Revolution

A Scheme based approach to managing the Operational Risk challenges of eSignature/eIdentity Interoperability and Liability in a world of electronic networks

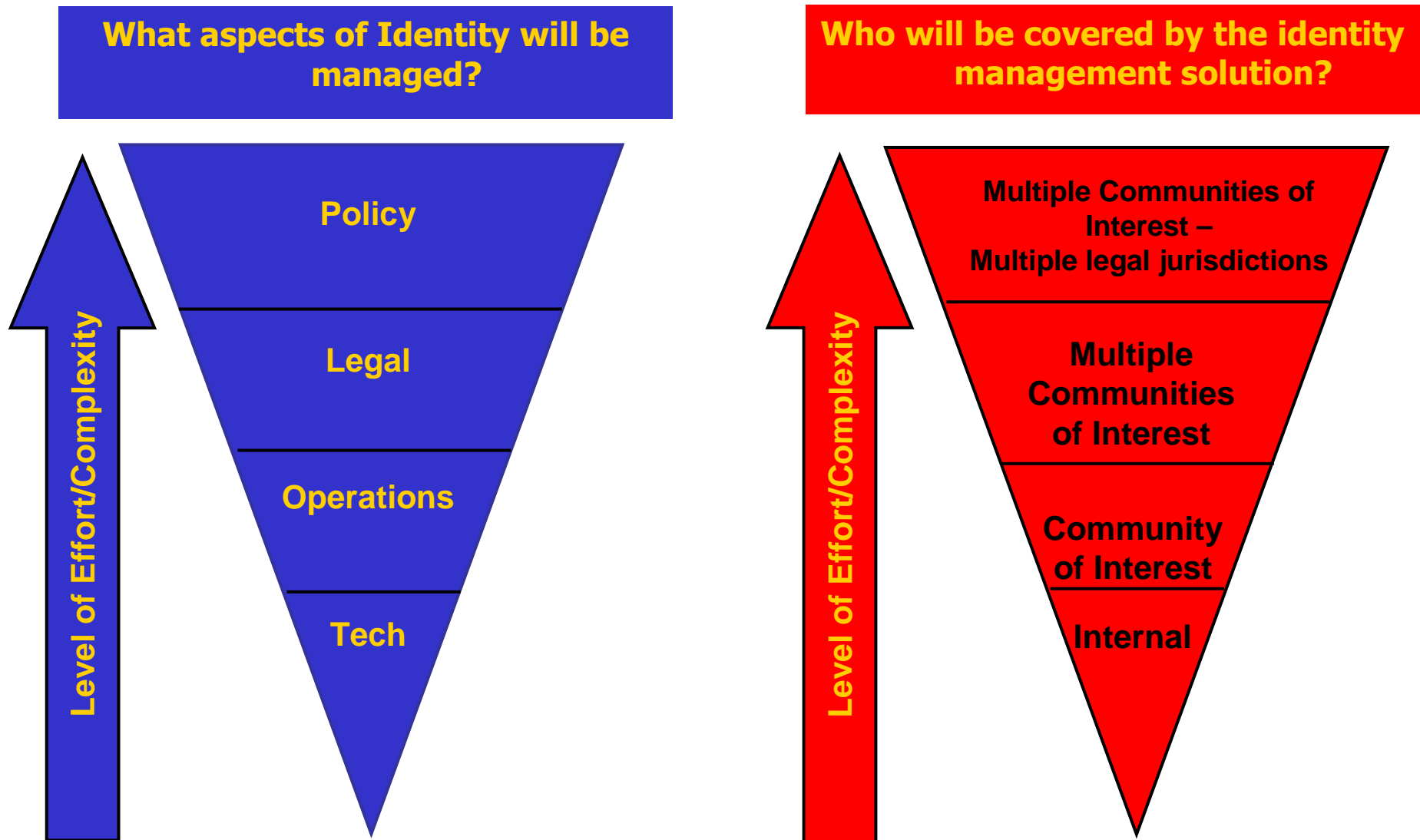
John Bullard
Global Ambassador
29th September 2009

What do we mean by “trusted eIdentity credentials”?

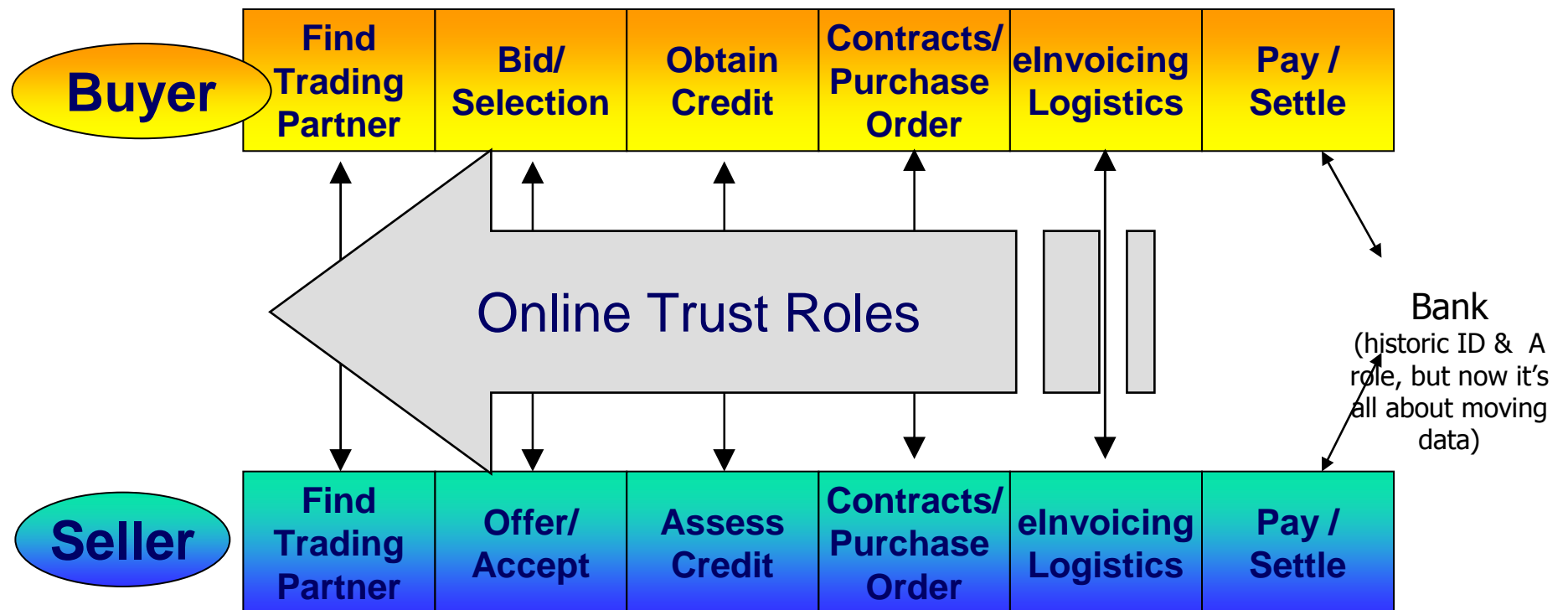
- ✓ Having ***absolute certainty*** of who you are interacting with
- ✓ Being ***able to check/validate*** that this is, indeed, the case
- ✓ Knowing who ***guarantees*** the identity of the individual
- ✓ A ***real name***, not just a number
- ✓ Having ***complete trust*** to act on their instructions
- ✓ Having a ***transparent audit trail***

In the online world, this creates many significant issues to overcome, especially in trade related transaction management

To be of real value, there must be clarity on 2 distinct issues for eSignatures



Why is this subject of significant interest to Citizens, to Businesses, to Governments..... & to their Banks ?



So, a Scheme based solution to “eSignatures” was developed for a world of increasingly ubiquitous free & open networks

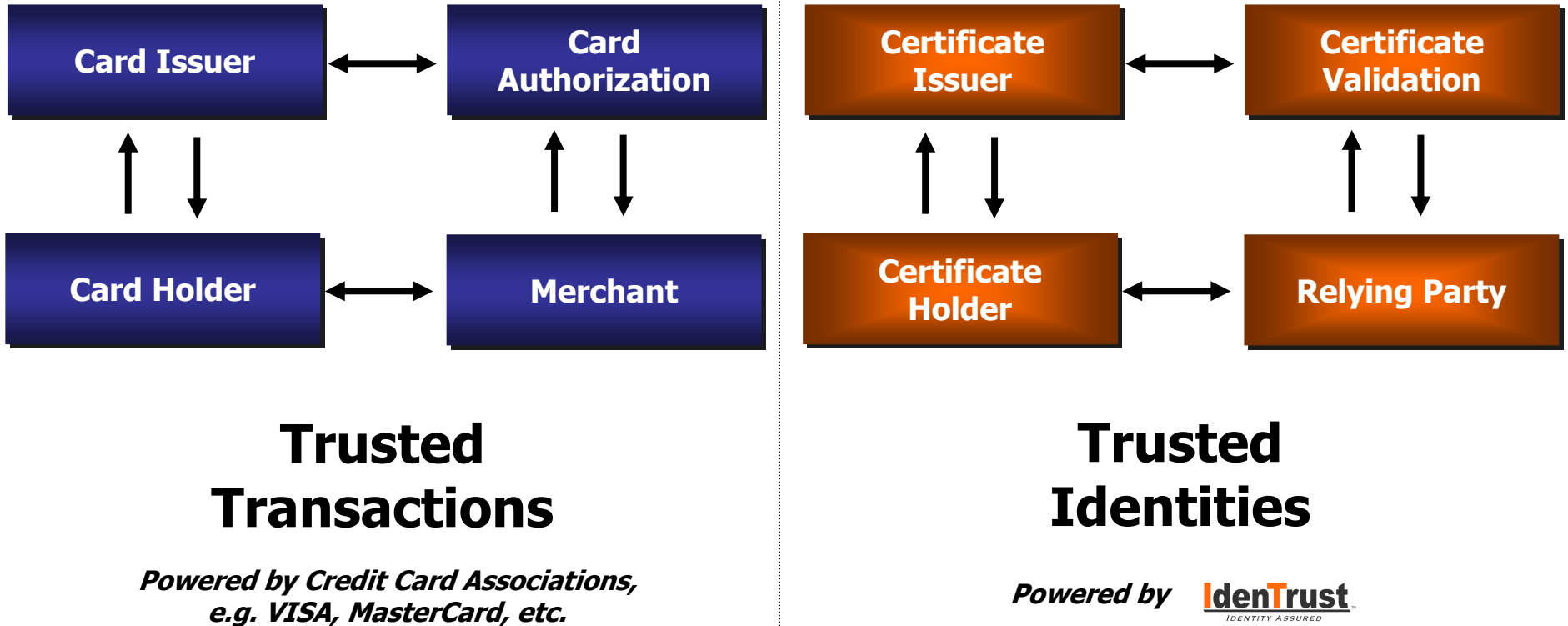
- An Identity Community where ...
 - Banks issue identity credentials usable in more than 100 countries
 - The scheme runs an identity validation network that is scalable, self-routing, real-time and highly secure
 - The scheme provides tools to embed identity into existing applications

- To do this, the Scheme provides ...
 - Common global standards (using non proprietary, established open standards)
 - A global and scalable network, not dependent on multiple bi-lateral contracts
 - An application framework which is open to all Application providers

 - **The effect of this is that the end user has control/decision & Freedom of Choice as to where and how he/she asserts his/her identity electronically within an overall framework**

 - **The Identity credential is driven by the Application, NOT the Application by the Identity credential.....**

The model is evolutionary, & comparable to Visa or MasterCard as Schemes for Card Payments



As a Third-Party Enabler that operates the network, uses established standards, and ensures compliance

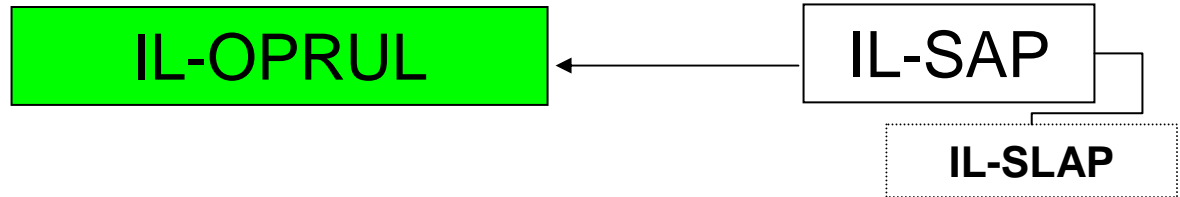
The IdenTrust scheme was created by leading banks from Europe, US & Asia

Together, they pioneered a **Rule Set** approach to identity management

<p>Policy</p> <ul style="list-style-type: none">✓ KYC consistency✓ Global regulatory compliance	<p>Legal</p> <ul style="list-style-type: none">✓ Global contractual framework✓ Contracted liability model✓ Dispute resolution
<p>Operational</p> <ul style="list-style-type: none">✓ Data centre security✓ Consistent manufacturing process✓ Secure fulfilment process✓ Cross community efficiency	<p>Technical</p> <ul style="list-style-type: none">✓ Industry-standard technologies✓ Interoperable solution elements✓ Consistent deployment

The IdeaTrust Scheme Rule Set

- * Referenced in IL-SAP
- Action documents
- Focus documents



IP-Policy

IP-ARC
IP-CACP
IP-CMLC
IP-ICP
IP-KMG
IP-
IP-OCSP
IP-OCSP
IP-PAA
IP-SCAP
IP-TIME
IP-UCP

IL-Legal

IB-GLOSS
***IL-DRP**
IL-KYC *
IL-
MARKS
OPRUL*
IL-RI
IL-SAI
IL-SAP
IL-SLAI
IL-SLAP *

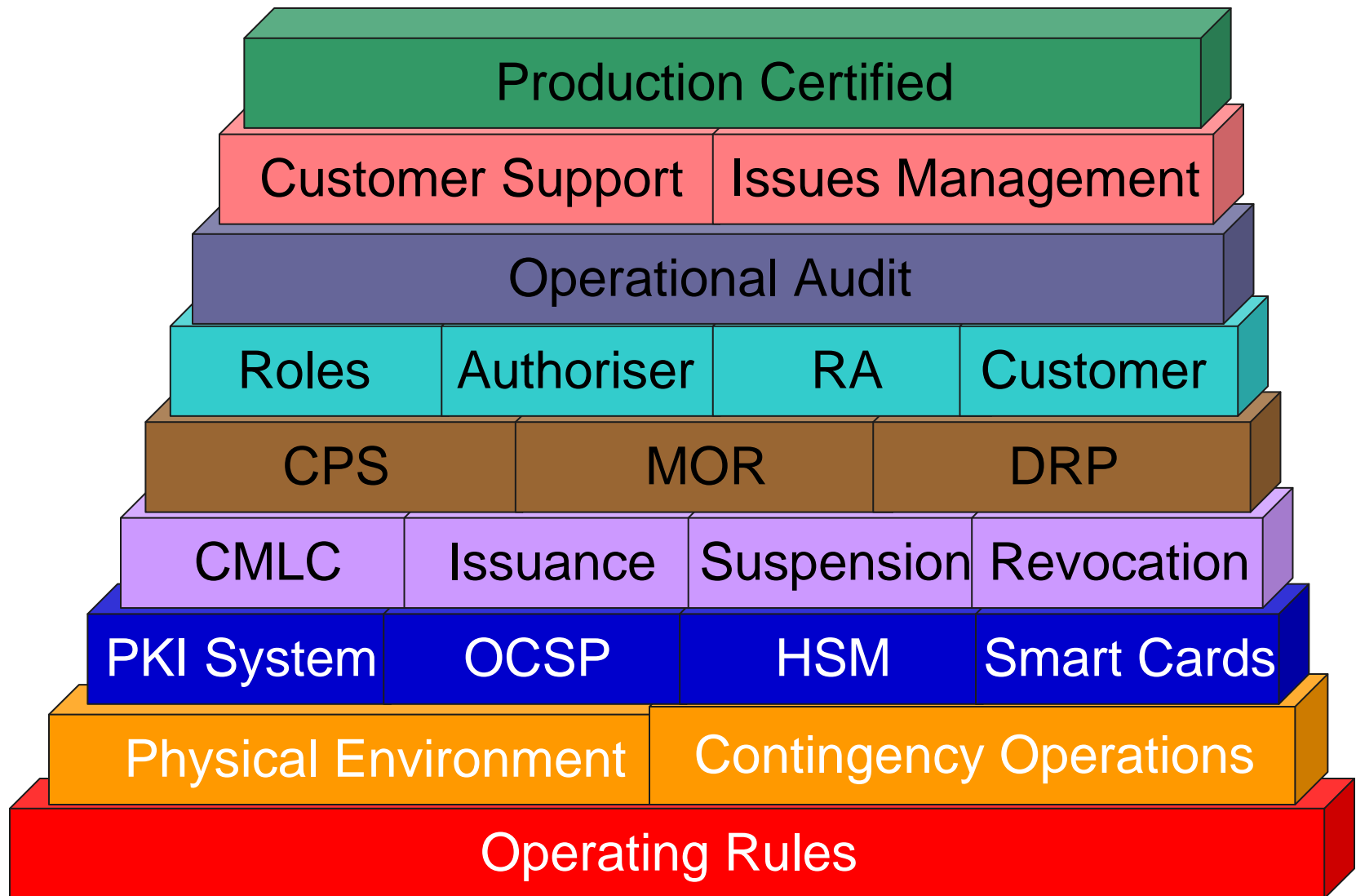
IO-Operations

IO-FORM
IO-MOR
IO-
OCAG*
IO-
OCAGP
IO-SLA
IO-SCSG
IO-
RCACPS

IT-Technology

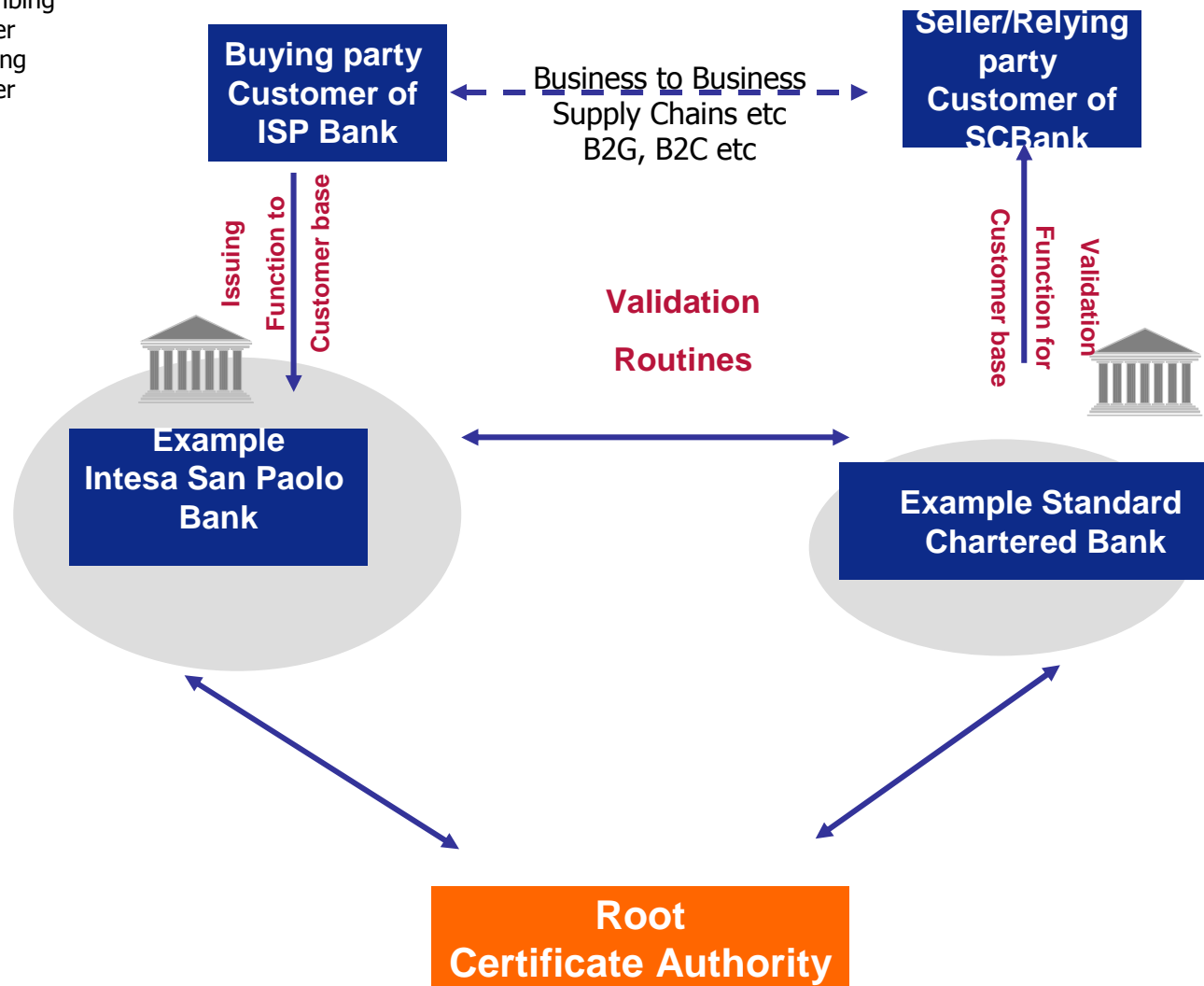
IT-INTRO
IT-DSMSSP
IT-DSVR
IT-HSMCR
IT-ITP *
IT-KSMR
IT-OCSPCR
IT-PKCS7
IT-PKI
IT-SIR
IT-SEM
IT-XMLDSIG

Building Blocks – all have a purpose

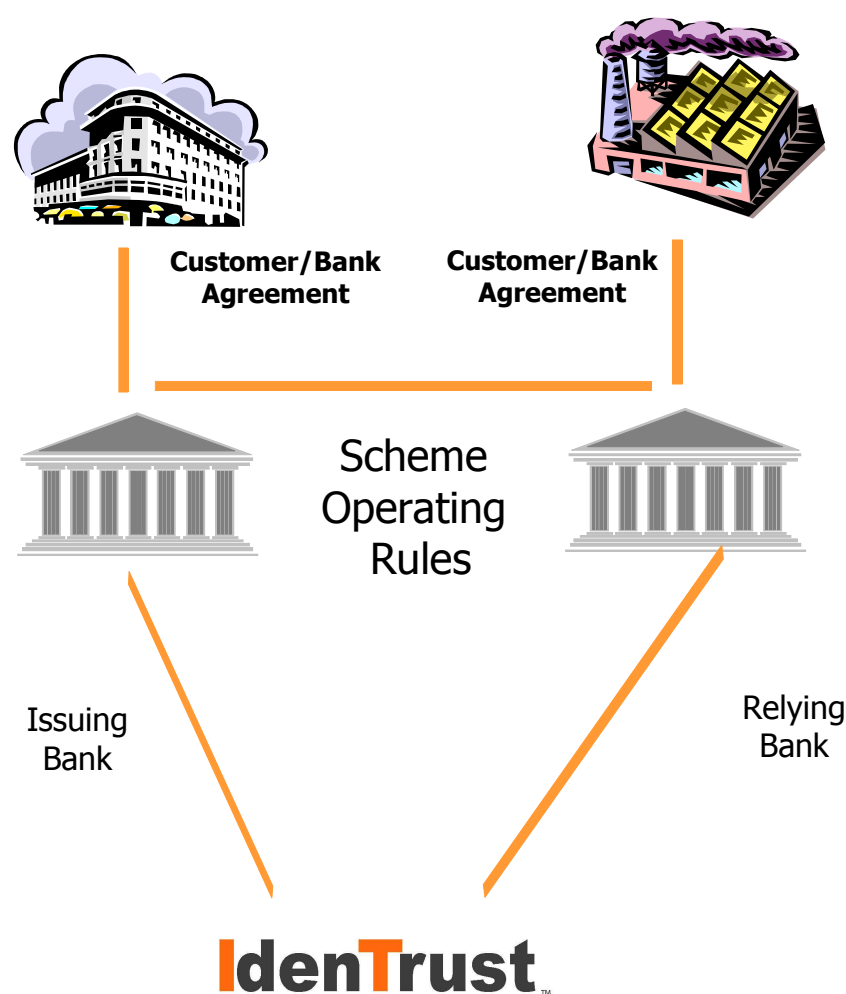


The Scheme is User centric and highly scale-able

SC – Subscribing
Customer
RC- Relying
Customer



& is based upon the Law of Contract



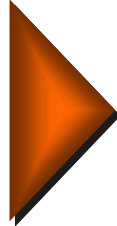
Relying
Customer

Global Legal Interoperability is Possible only in a Closed Contractual System governing:

- Liability and Recourse Among All Parties
 - Contractual System: Operating Rules bind Root and CAs.
 - Customer Agreements bind customers to contractual liability limitations.
- Legal Recognition of Digital Signatures
- Contract Formation Electronically
 - Signed OCSP validation assures every Relying Party is bound to a customer agreement
 - Legal effect of digital signatures authenticated by validated certificates provided by contract, globally
- Dispute Resolution over Signature Validity
 - Dispute Resolution Procedures provide private forum (London Court of Arbitrage)

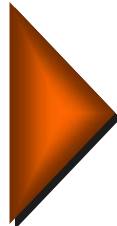
It provides three key capabilities essential for the trusted Transaction Management

1. Authentication



- **Proving identity**

2. Encryption



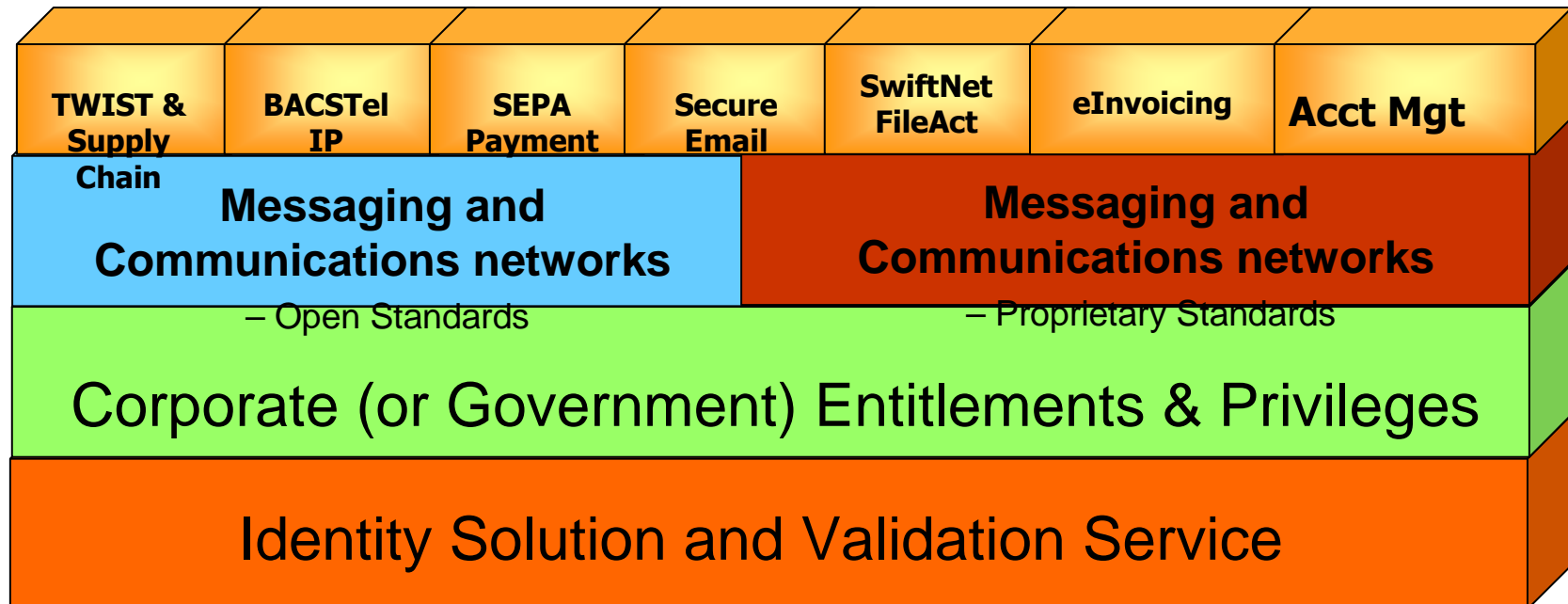
- **Safeguarding content**
- **Ensuring document integrity**
- **Eliminate pharming**
(man-in-the middle or DNS poisoning)

3. Digital Signing



- **Replaces 'wet' signatures**
- **Provides user-level signatures**
- **Enables Straight Thru process**

It serves as a multi-use identity and validation layer



- Lower cost of ownership and economies of scale are achieved through spreading fixed costs across a larger volume of certificates- Multipurpose certificates have a greater value than single use certificates
- Improved customer experience through the use of standard authentication methods across the enterprise and interoperability of certificates both internal and external from the enterprise, and future proofing your investment by building a solution that satisfies future customer supply chain requirements

What are the alternatives? Disjointed point solutions, or a multipurpose one? Compare historic parallels eg Electricity voltages, Railroad guages etc...

Secure email	SAP	eInvoicing & Trade Mgmt	Country Scheme e.g. CNIPA (Italy)	BACSTEL-iP (UK)	Electronic Banking	Other Applications
An integrated Identity Solution						

Single vs. Multiple Platforms (cost, maintenance, complexity)

Interoperable vs. 'Point' Solution

VS.

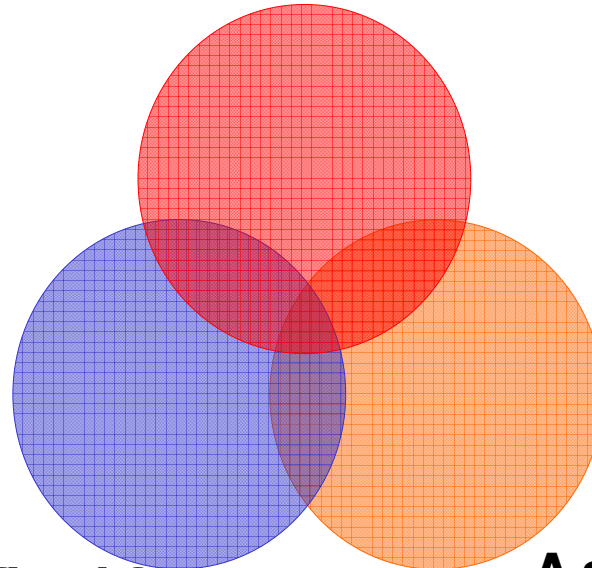
FileAct	SAP	eInvoicing & Trade Mgmt	Country Scheme e.g. CNIPA (Italy)	BACSTEL-iP (UK)	Electronic Banking
Identity Solution 1	Identity Solution 2	Identity Solution 3	Identity Solution 4	Identity Solution 5	Identity Solution 6

High vs. Lower RoI

High vs. Low Scalability

What alternatives....?

A solution defined by national boundaries, which cannot operate outside?



**A solution defined for a single Industry verticle ?
(eg Pharma, Aerospace,)**

**A solution defined by a product/application?
(eg Funds Transfer Only
eInvoicing only
or Logistics only)**

**Or a bank centric scheme approach which
can cover the convergence of all 3 circles...**

... and is capable of providing multiple types of solutions, both physical & financial supply chain...

Financial Services Applications

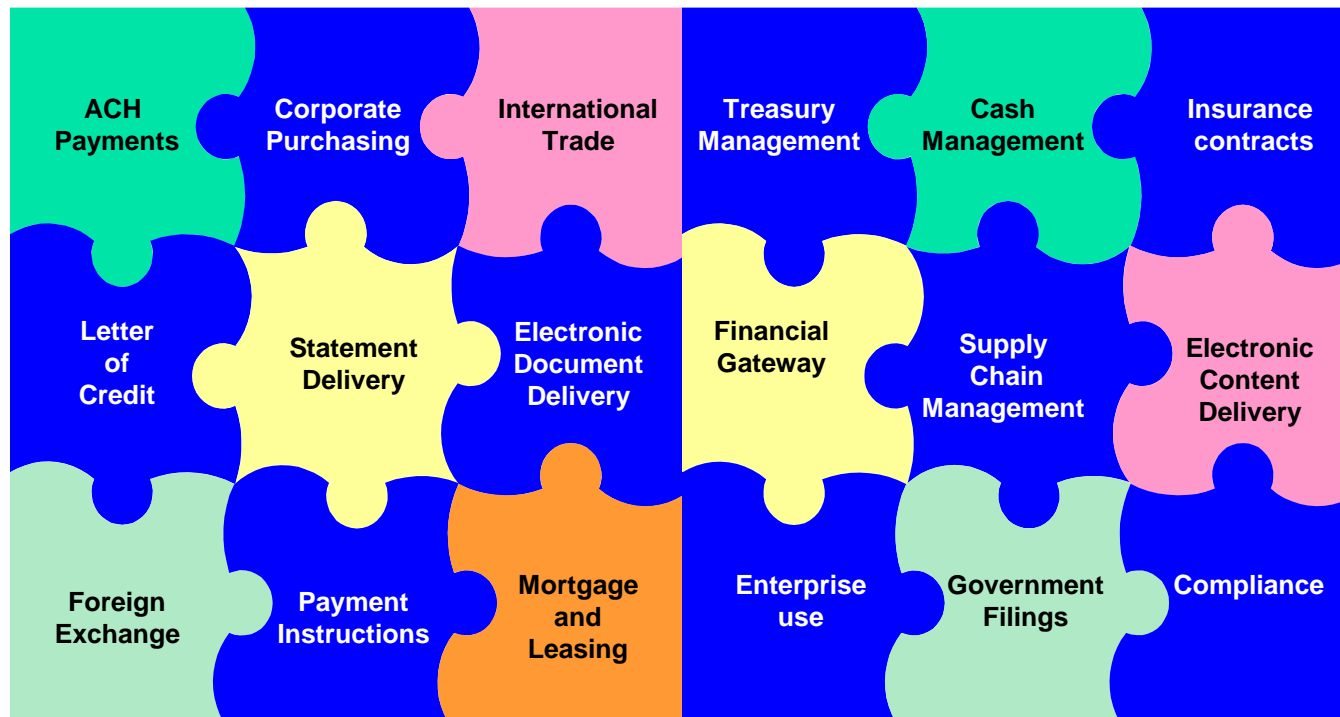
- Single Sign On
- Anti-phishing and anti-pharming
- EMV (Europay, MC, Visa) chip and pin
- ACH Payments/SEPA implementations
- Corporate Purchasing
- International Trade
- Letters of Credit
- Statement Delivery
- Electronic Doc Delivery/Exchange
- Foreign Exchange, Stock Exchange etc
- Payment Instructions
- MiFID/SarbOx etc compliance
- Mortgage and Leasing Processing

Corporate Applications

- Online Auction Markets
- Electronic Content Delivery
- Insurance Sales and Contracts
- Securities/Capital Markets Trading
- Government Filings, Procurement
- eTax Payments
- Health sector
- Verticals – Pharma, Energy, Defence
- Financial Gateway
- Credit Decisioning
- Access Control
- Cash Management Services
- Invoicing/Purchase Order Exchanges

Each of these applications can be streamlined and improved through the use of trusted Identities

...each usable independently or as part of a broader interconnected Supply Chain structure



I denTrust – Identity – Validation – Liability Management
Globally interoperable – Legally enforceable

- **Thank you !**
- **Use cases in subsequent slides**

IdenTrust's critical role in BACSTEL-iP – the UK payment processing network

BACSTEL-iP

- **5.6 billion** (5,600,000,000) **transactions** processed last year, with a peak daily volume of **95 million**
- **15%** of total payments in **Europe**
- Payment values of c. **\$6,800 billion** in 2007, or c. **\$27.4 billion per day**
- Processes all **non-cash/cheque payroll**
- Processes **70% of all household bills** and majority of state benefits

IdenTrust

- **12/15** BACS members use IdenTrust as the underlying identity and security solution
- **11/15** will use Trust Infrastructure by year end



Use case examples (1/2)

■ Internet Banking

- High assurance user authentication; legally-binding transaction non-repudiation
- Straight-through-processing; fraud prevention
- Protection against phishing, pharming, man-in-the-middle and man-in-the-browser threats



■ User-level signing of Payment Files

- Authentication and legally-binding transaction non-repudiation; liability limitation
- BACSTEL-iP, SEPA, SWIFT, Host2Host, Internet channels



■ Electronic Document Signing

- Paper dematerialisation through legally-binding digital signatures
- Electronic forms (e.g. loan agreements) and contracts (e.g. leasing agreements)

Use case examples (2/2)

- **Electronic Bank Account Management**

- Online account opening, account closure, account maintenance, signatory management; STP and non-repudiation



- **Electronic Invoicing and Trade Finance**

- Straight-through-processing; binding of contracts
- e-Invoice VAT compliance



- **Trusted Email**

- Email encryption and digital signing
- Bank ↔ bank, bank ↔ corporate, etc

- **Identity Platform Consolidation**

Rationale

Banks

- No need to create and maintain 'new' identity scheme
- Rapid time to market
- Cost effective and proven RoI
- Single identity solution for corporates
- Single identity solution for other 'high assurance' services

***Proven
scheme***
Proven network
Global
Interoperable
***Multi
application***
***Liability
framework***

- Rapid deployment
- Single identity solution; reusable across other bank and corporate applications
- Available today from many 'foundation banks'

**Businesses,
Public Sector,
then Consumers**