

- » BOOST PERFORMANCE
- » REDUCE COST
- » INCREASE AGILITY
- » ENHANCE CRM
- » SHORTEN TIME TO MARKET
- » DRIVE INNOVATION
- » IMPROVE EFFICIENCY
- » INCREASE ADAPTIVITY
- » ENABLE BUSINESS TRANSPARENCY
- » ENSURE REGULATORY COMPLIANCE



CONSULTING > SOLUTIONS > OUTSOURCING

Trust and Trustworthiness in the Future Internet

Jose Maria Cavanillas, Leon, Feb 11th 2010

Fish story

- Atos Information Security Services (AISS)
- Our distinctive offer in Identity, Security and Risk Management (ISRM)
- Atos Research & Innovation (ARI) and ISRM

Water story

- Challenges of Trust and Trustworthiness in the Future Internet
- Moving targets in information security
- Problems related to technology transfers

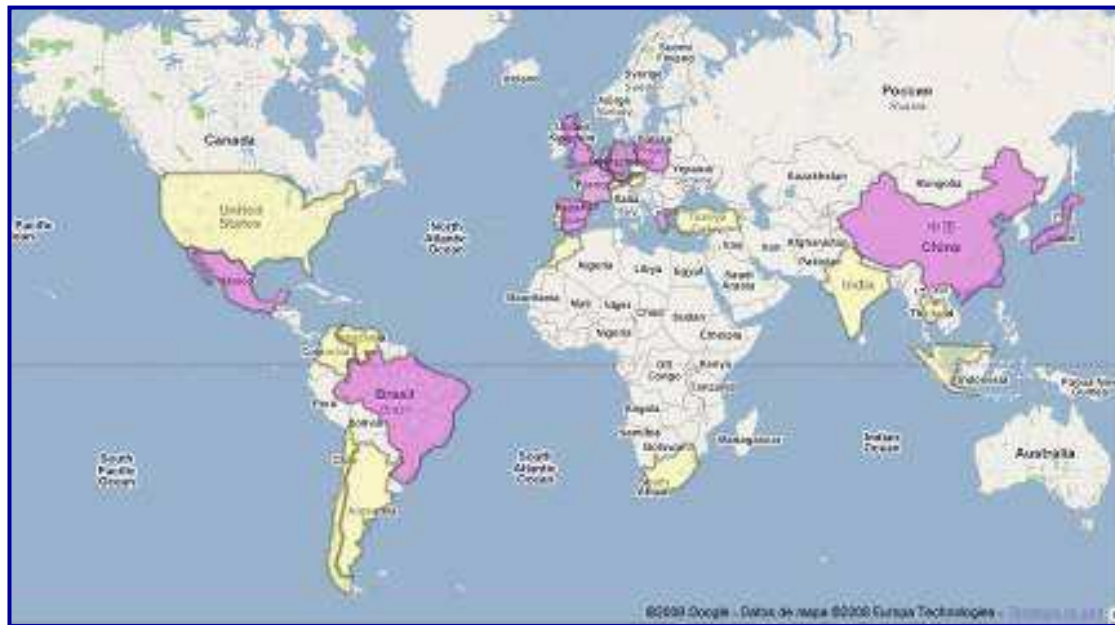
Bridge story

- Research efforts where ARI is already actively involved
- ARI collaborations with Universities
- Best practices and few use cases

Atos Information Security Solutions

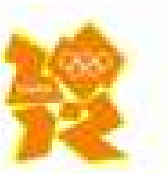


A trusted solution partner enabling mitigation of business risk through the integration and management of information security.



A global practice of 350 Security professionals delivering:

- Business Risk Mitigation, Security Strategy and Compliance
- Identity and Access Management
- Security Infrastructure
- Managed Security Services



Distinctive Offerings



Public Sector **Financial Services** **Manufacturing** **Utilities** **Telecom**

SEPA **SAP MMT** **Nuclear I&C** **NGIN**
MES **Smart Metering** **Convergent Billing**

Distinctive Offerings

Adaptive Workplace
Enterprise Content Management
Identity & Security Management
Payments
SAP ERP Transformations
Testing & Acceptance Management

Mainstream Offerings

Consulting >> Systems Integration >> Managed Operations

Global Sourcing – Delivery Model
 Providing a cost effective balanced delivery capability to serve the complex demand mix of individual clients

Atos Research & Innovation

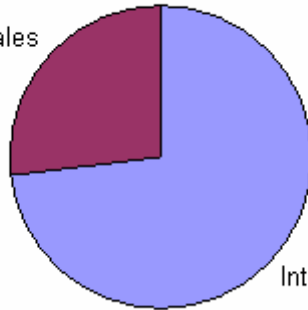


Atos Research & Innovation

Come with us to the future of technologies



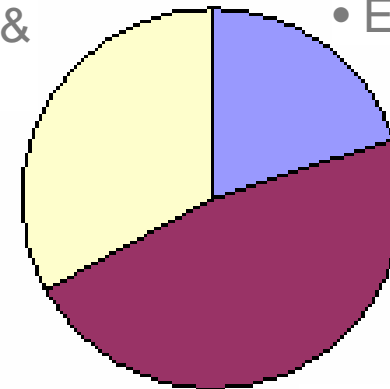
Nacionales



Internacionales



Management & coordination



Technical Development

Other tasks:

- Dissemination
- Exploitation

ADVANCE YOUR BUSINESS >>

Atos Origin in Spanish R&D&I Constellation

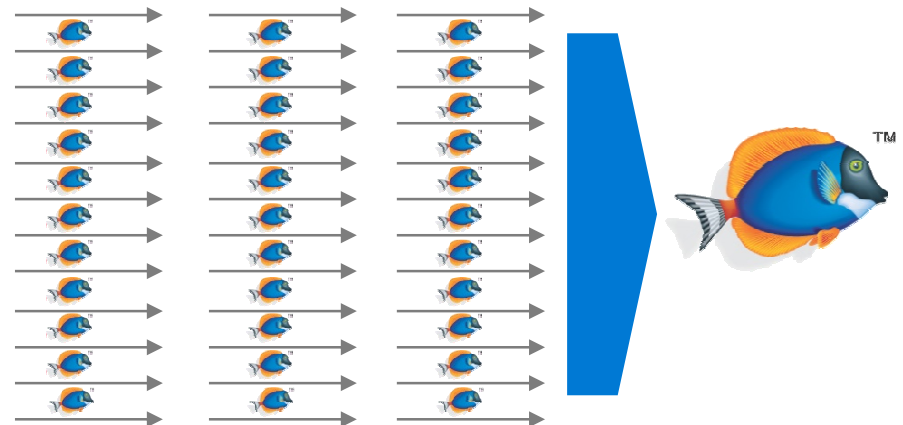


Some facts:

- 200 R&D&I projects in the last 15 years
- 2008: 80 R&D&I ongoing projects
- December 2007, Atos Origin in the Spanish R&D&I constellation:



- No. 5 as global R&D actor
- No. 2 as industrial actor
- No. 1 as global R&D leader

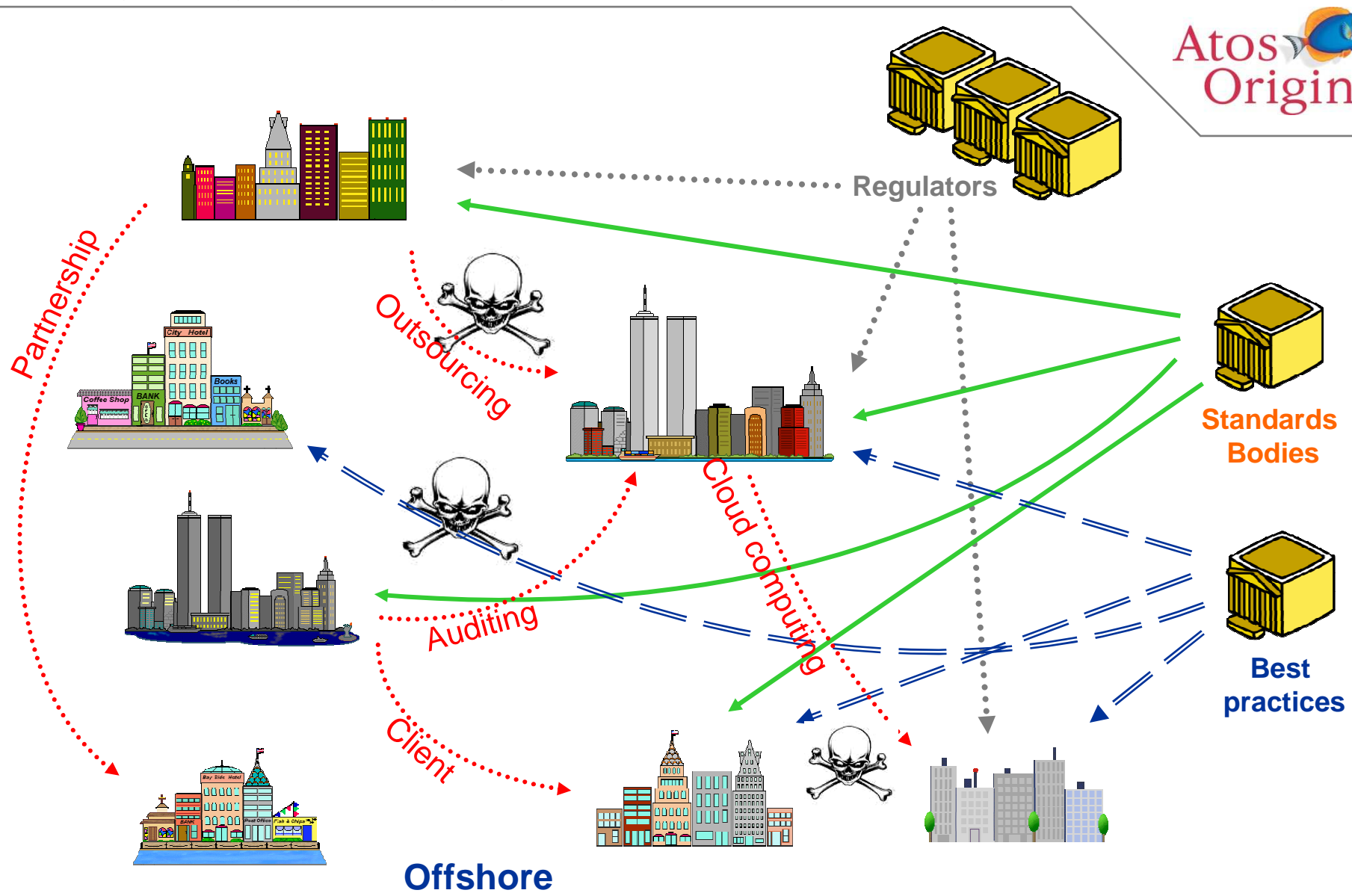


The Sea of Complexity



Applications will need to utilise **shared and co-owned** services out of **different domains** of control that require to obey **separate security policies** and ask for **diverse** security and dependability qualities

The River of Threats



The Lake, the Ice, the Steam...



Business Challenges

- Improving business process
- Attracting and retaining new customers
- Creating new product and services

Organizational Challenges

- Increasing need for collaboration inside and outside the organisation
- Changing work habits (mobility, working from home, PDA...)
- The job of the CISO is broadening (legal, finance, HR...)

Technical Challenges

- Security concerns introduced by new technology (web 2.0)
- Disruptive innovation (Infrastructure virtualization)
- Many off the shelf solutions addressing specific challenges

XXX Over Troubled Water



...we need metrics, we need aggregated metrics, we need trustworthy metrics, we need “executive dashboard” metrics, we need usable metrics...or at least “INDICATORS”.

Enterprise Metrics & Dashboards Are Critical - Sample

| Security Management | Information Architecture | Security Operations |
|--|--|--|
| General Snapshot <ul style="list-style-type: none"> ● Policies ● Awareness ● Enforcement ● Corporate-wide support & investment ● Industry benchmarking ● Information Flow | Real Time <ul style="list-style-type: none"> ● Classification ● Handling <ul style="list-style-type: none"> ● Storage ● Encryption ● Digital Records Mgt. ● Exchange / Transfer ● Authenticated Content ● User Identity ● User / Device Authentication ● Entitlement | Real Time <ul style="list-style-type: none"> ● Secure Environment / Core Defences <ul style="list-style-type: none"> ● Hardening ● Patching ● Anti-virus ● SPAM Protection ● Personal Firewall ● Network Firewall ● Secure Transport ● Scanning |



Compliance Governance Dashboard
Organization Compliance 77%

Table - Business Units x Regulations

| Business Process | PI | P2 | CAR | CM | DAR | IPM | MA | DD | DDP | OPF | OPD | OT | PMC | PP | PI | QPM | KP | Sec 301 | Sec 302 | Sec 404 | Sec 406 | |
|------------------|----|----|-----|----|-----|-----|----|----|-----|-----|-----|----|-----|----|----|-----|----|---------|---------|---------|---------|--|
| BP 1.1 | | | | | | | | | | | | | | | | | | | | | | |
| BP 1.2 | | | | | | | | | | | | | | | | | | | | | | |
| BP 1.3 | | | | | | | | | | | | | | | | | | | | | | |
| BP 1.4 | | | | | | | | | | | | | | | | | | | | | | |
| BP 1.5 | | | | | | | | | | | | | | | | | | | | | | |
| BP 1.6 | | | | | | | | | | | | | | | | | | | | | | |
| BP 1.7 | | | | | | | | | | | | | | | | | | | | | | |
| BP 1.8 | | | | | | | | | | | | | | | | | | | | | | |
| BP 1.1 | | | | | | | | | | | | | | | | | | | | | | |
| BP 1.2 | | | | | | | | | | | | | | | | | | | | | | |



SEGUR@: Identity in a converging ICT



- » Atos Origin is developing in-house a lightweight face recognition system to work in a mobile environment, based on the Eigenfaces algorithm to protect a secured service from an unauthorized user.
- » Strong mobile authentication for remote services
- » Collaboration between Atos Origin and Universidad de Murcia:
- » Enabling the use of the Spanish national electronic ID card (**DNle**) into new services
- » Integration of **Future Internet** middleware for federated identity management and levels of assurance for multi-layered service provisioning.





Privacy and Identity Management for Community Services

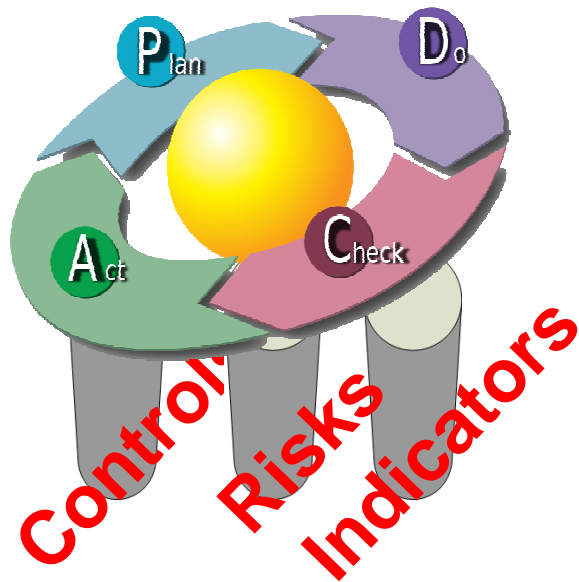


- **PICOS** focuses on social networks challenges by addressing the Trust, Privacy and Identity issues in new context-rich mobile communication services, especially community-supporting services.
- Atos Origin leads research and implementation in mobile platforms and technologies from a **multilateral security** perspective.



- Mvía aims to enhance the application of mobile and wireless network technologies in **road safety** and added-value services like entertainment for drivers and passengers.

Management of Assurance, Trust and Compliance



Business Challenge

- » Translation of non-trivial business goals, compliance requirements and organisational policy aspects into technical controls
- » The control and compliance enforcement in outsourcing scenarios

Our Solution

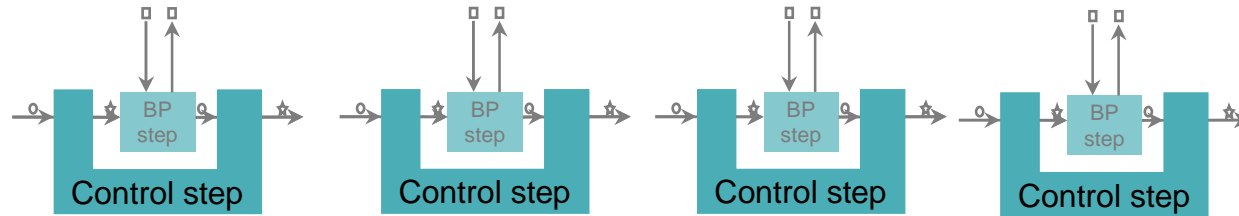
- » Atos Origin leads a consortium of 14 organisations to design and implement a standards based compliance management solution
- » Developed and implemented applications for:
 - » Compliance engineering and management automation
 - » Integration with ISMS (Information Security Management System) or GRC (Governance, Risk, Compliance)

Project Results

- » Cost-effective control and compliance in outsourced environments
- » Reduced errors in compliance engineering
- » Alignment of corporate governance and IT security levels that contributes to creation of value

MASTER

Managing Assurance,
Security and Trust for sERvices



Home | Our Approach | Services | Find out more

A complex journey made simple

Migrating to the Cloud presents a number of challenges. How do you address issues such as security, service quality and interoperability whilst managing your legacy estate? You need to find solutions that will serve your business today and embrace what the Cloud has to offer in the future.

ATOS SPHERE: Shape the Cloud your way

Cloud Computing represents a significant shift in the delivery and consumption of business and consumer services, replacing the established methodology of fixed hardware and software solutions and opening up a more flexible, agile, dynamic and efficient business model. Atos Sphere gives you the benefits of our Cloud Services portfolio:

Our Approach

Cloud technologies now make it possible to provide shared solutions that are flexible and charged on a pay-as-you-go basis for both infrastructure and applications. This allows both private and

Services

We engage peer-to-peer with senior enterprise decision-makers in order to go beyond standard service provision and respond to the individual needs of your business. From a Cloud Awareness seminar to

Find out more

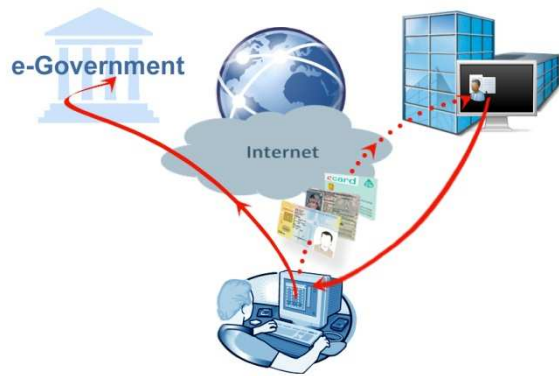
There is no single Cloud Services solution for any business. Every organization requires a unique strategy to ensure that it can maximise the opportunities that the Cloud offers whilst minimising cost and disruption

ADVANCE YOUR BUSINESS >>

STORK



Secure idenTity acrOss boRders linked



The Results

- » EU-wide interoperable system for recognition of eID and authentication that will enable businesses, citizens and government employees to use national electronic identities in any Member State.
- » Simplification of administrative formalities by providing online access to public services across EU borders,

Business Challenge

- » Establish a European eID Interoperability Platform that will allow citizens to establish new e-relations across borders, just by presenting their national eID.

Our Solution

- » Atos Origin leads a consortium of 29 organisations (13 Member States + Iceland) to develop and test common specifications for secure and mutual recognition of national electronic identity (eID) between participating countries.
- » Implement pilots to test the common specifications in real environments :
 - » Cross-border authentication platform for electronic services
 - » Safer Chat, Student Mobility, Electronic Delivery
- » Robust, transparent, safe to use, scalable solution, and be implemented in such a way that it is sustainable beyond the life of STORK



Several Case Studies from our Clients



More references at:

http://www.atosorigin.com/en-us/services/solutions/atostm_information_security_solutions/

**International
Olympic
Committee**

End-to-end, integrated security management programme
No security incident impacting Games time operation

**UK Government
Gateway**

Providing secure access to 11 millions users with proven 99.99% availability
Enabling communication between citizens and UK government

Trust Center

Managed PKI solution for the German Health Care Industry
Enabling secure transaction between Health Care stakeholders

Airbus

Enabling Compliance to regulation
Harmonization of HR Management across Europe

**Banque De
France**

Designing and implementing a log consolidation solution
Improved reporting and cost control

Philips

Managed identity solution
Stabilization of production and improved Monitoring / Alerting / Reporting

ADVANCE YOUR BUSINESS >>

Different people have different expectations

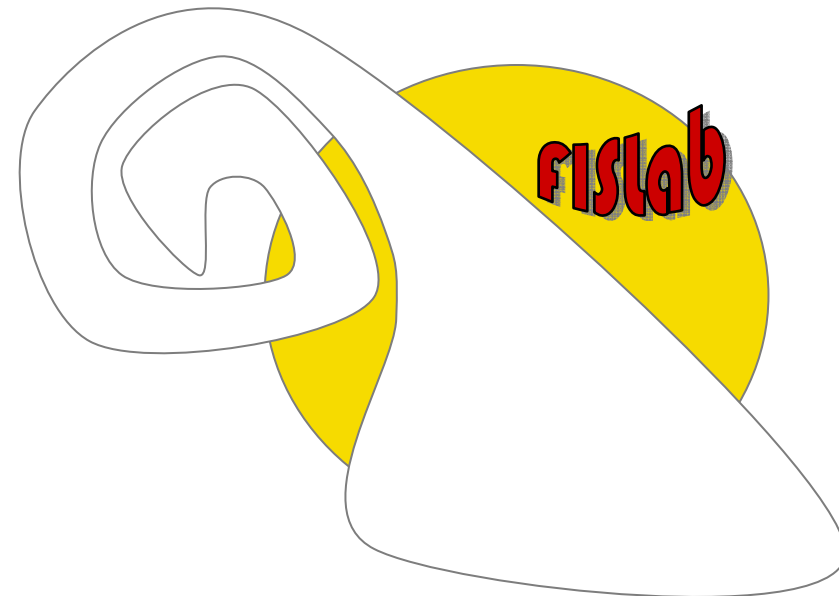


- **We need a bridge between different communities and their expectations**
 - **CxO:** How much \$, €, £... will cost us this Future Internet security?
 - Research Community:
 - Citizens:
 - Government
 - Industry
-
- We need iterative process with frequent stakeholder interaction
 - We need FI Core platform as well as main building blocks to take security, trust, privacy and dependability into account from the start
 - We need international collaboration TSD research to work on global challenges such as metrics and indicators

Future Internet Security Testbeds



- Bridge between the current and future internet
- Atos signed MoU with UC3M to work together on FISLab, an experimental facility that has joined PlanetLab Europe



International collaboration: yet another bridge to cross



- Future Internet – an **opportunity** for collaboration



end-to-end location-ind. services



the best of all communities

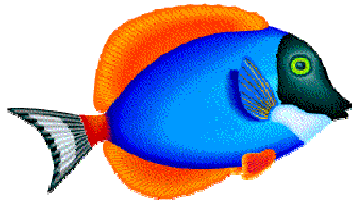


optimise resources

- ✓ Validate the best competitive applications and usage scenarios worldwide
- ✓ Avoid reinventing the wheel



Thank you



FACING TECHNOLOGICAL CHALLENGES TOGETHER

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