



EPCglobal Update

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Right Partner.

Real Value.

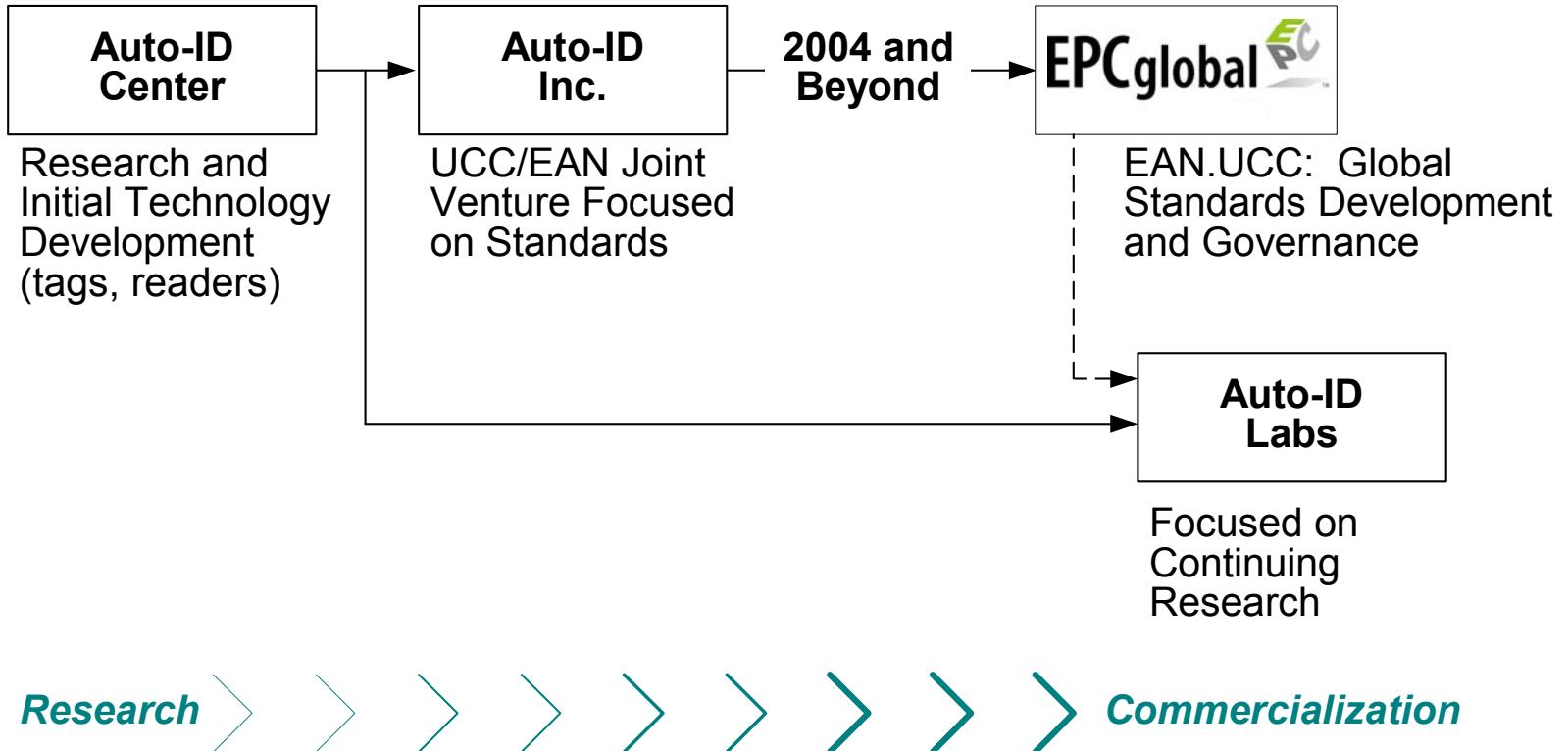
Right Now.

A look into the past....



Evolution to EPCglobal

From New Technology to Business Standards





Future of Auto ID Center

- Phase I research reaching conclusion
- Time to hand off Version 1.0 to the commercial arm
- Only through real implementation will we be able to identify and correct systems issues
- Only through mass adoption will we gain the benefits the system offers
- Only through implementation we will define the needs for new research
- UCC and EAN are our selected commercialization partners



UCC and EAN

- Uniform Code Council (UCC) was among the founding sponsors of the Auto ID Center
- The EAN.UCC System provides a global language of business for over one million companies in over 140 countries around the world
- UCC and EAN have an unmatched track record in the development and implementation of open, global standards
- UCC and EAN are uniquely positioned to move EPC research into real world implementation on a global basis



Roles and Responsibility

MIT

- Research, grad and undergraduate education
- Development of new technology
- Publish to maintain awareness
- Outreach to other universities and research institutions
- Government / other funding

UCC and EAN

- Administration of the system
- Commercialization and implementation of EPC
- Manage IP
- Marketing and communication
- Standards development
- Training and education



2003 Projections

- Auto ID Inc. must have the following cumulative number of users:
 - 2004 20
 - 2005 40
 - 2006 80
 - 2007 160
 - 2008 320
 - 400 each year thereafter



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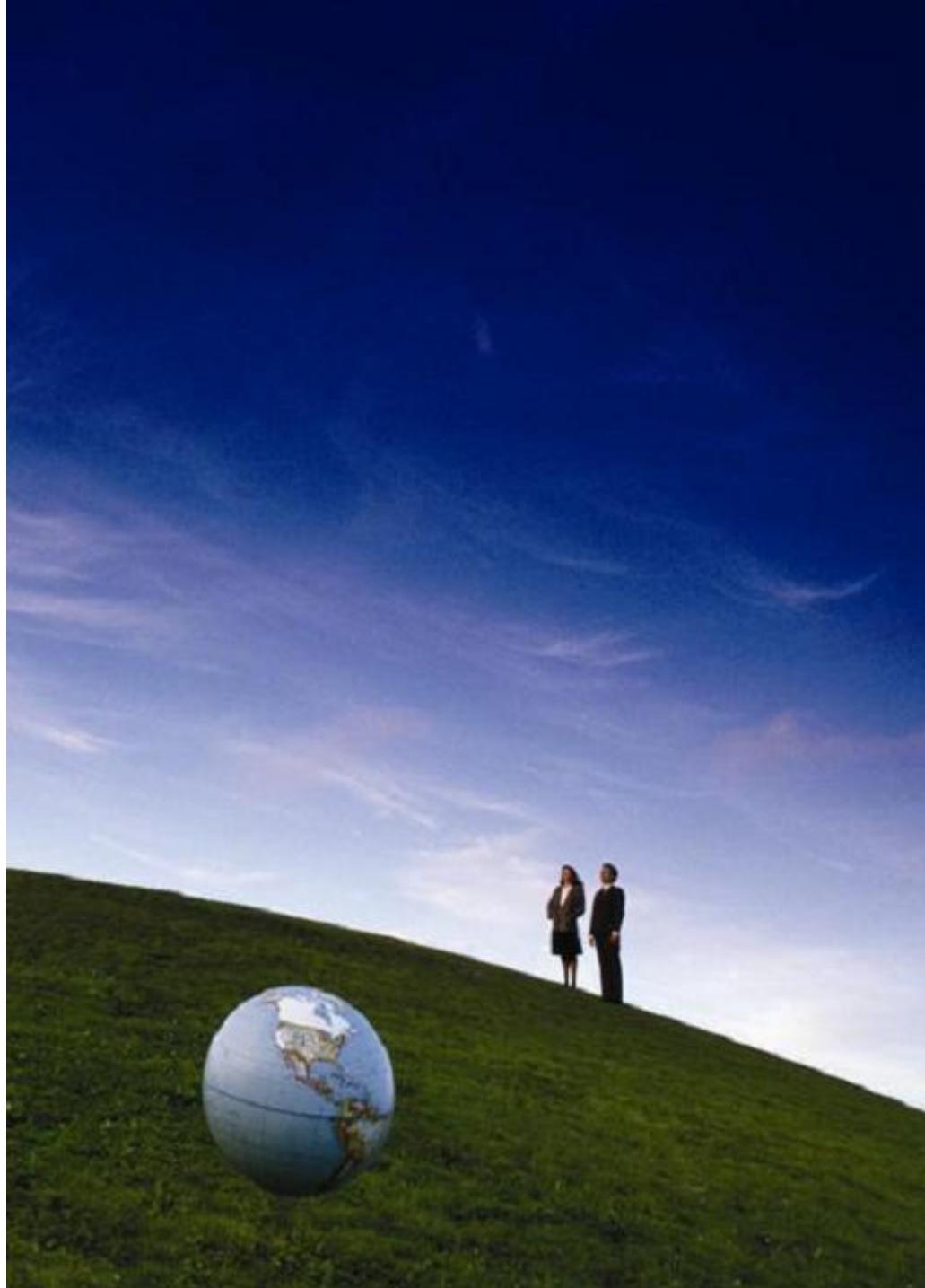
Where we are today.....



EAN is now GS1

Single global organization

A product portfolio for today's business needs and for the future





GS1: a diversified portfolio

- GS1 has a full portfolio of products and solutions



Global standards for automatic identification

Rapid and accurate item, asset or location identification



Global standards for electronic business messaging

Rapid, efficient & accurate business data exchange



The environment for global data synchronisation

Standardised, reliable data for effective business transactions



Global standards for RFID-based identification

More accurate, immediate and cost effective visibility of information



EPCglobal Purpose

- Take a global leadership role in developing and promoting multi-industry, user driven standards for collaborative commerce utilising the EPC
- To deliver added value to our customers and stakeholders through our activities
- Drive the global, multi-industry adoption of EPC via the GS1 Member Organizations



Expanded statement of purpose

- To act as the trusted authority on technical standards relating to the use of the EPC
- To effectively manage public policy issues that are relevant to use of EPC

Membership across the world

| | Total # Members | % Total |
|---------------|-----------------|-------------|
| Asia | 148 | 20% |
| North America | 451 | 62% |
| Europe | 110 | 15% |
| ME & Africa | 8 | 1% |
| Latin America | 16 | 2% |
| Total | 733 | 100% |

- Each organization joins once in the location of the head office



Significant growth in all regions

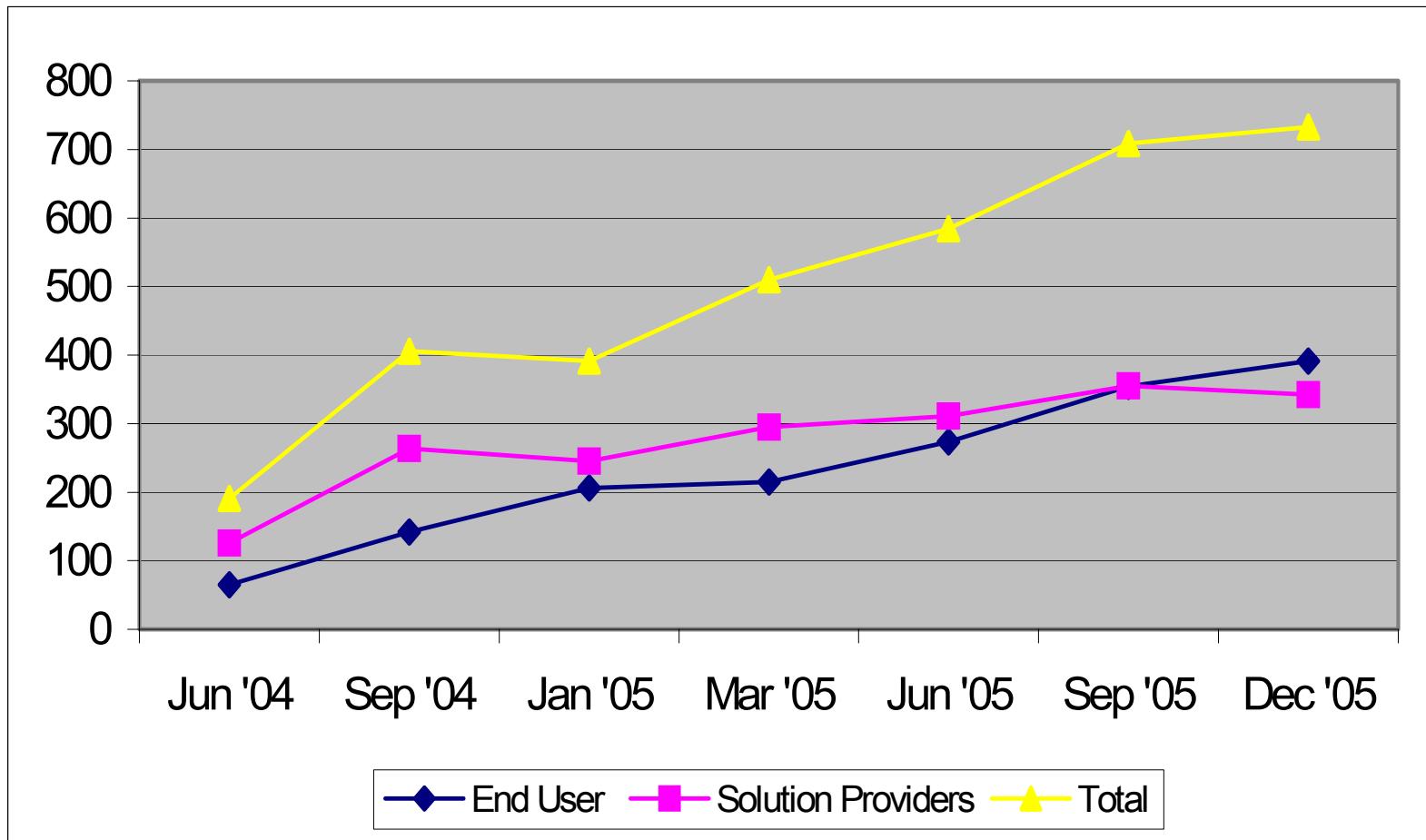
- EPC global is only two years old!

| | Jun 2004 | Dec 2005 | % Increase |
|------------------------|------------|------------|-------------|
| Asia | 21 | 148 | 705% |
| North America | 132 | 451 | 342% |
| Europe | 36 | 110 | 306% |
| ME & Africa | 2 | 8 | 400% |
| Latin America | 0 | 16 | - |
| Total | 191 | 733 | 384% |

- Note: End 2004 = 391



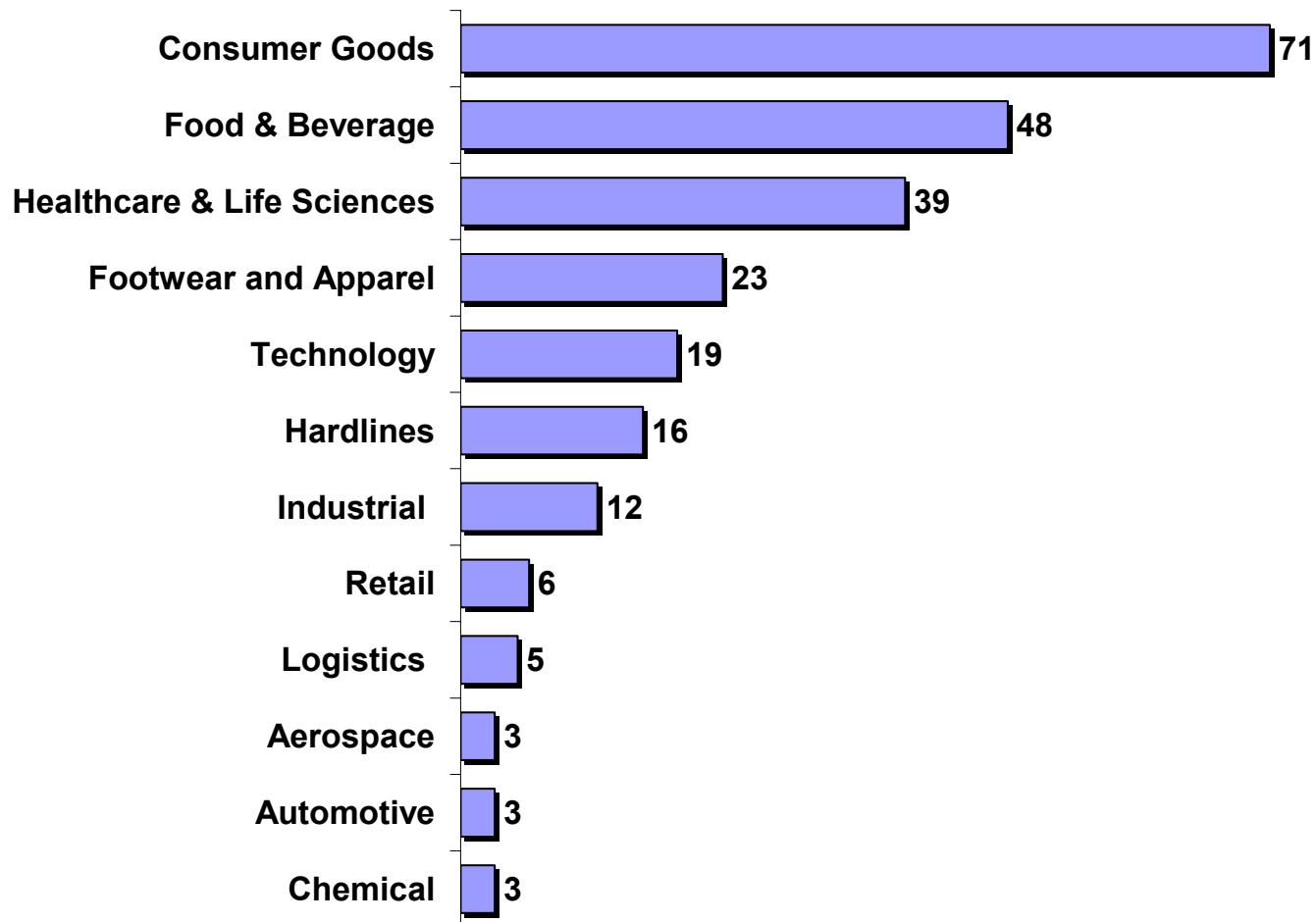
End users now 53% of total membership



Membership growth in all sectors

US example

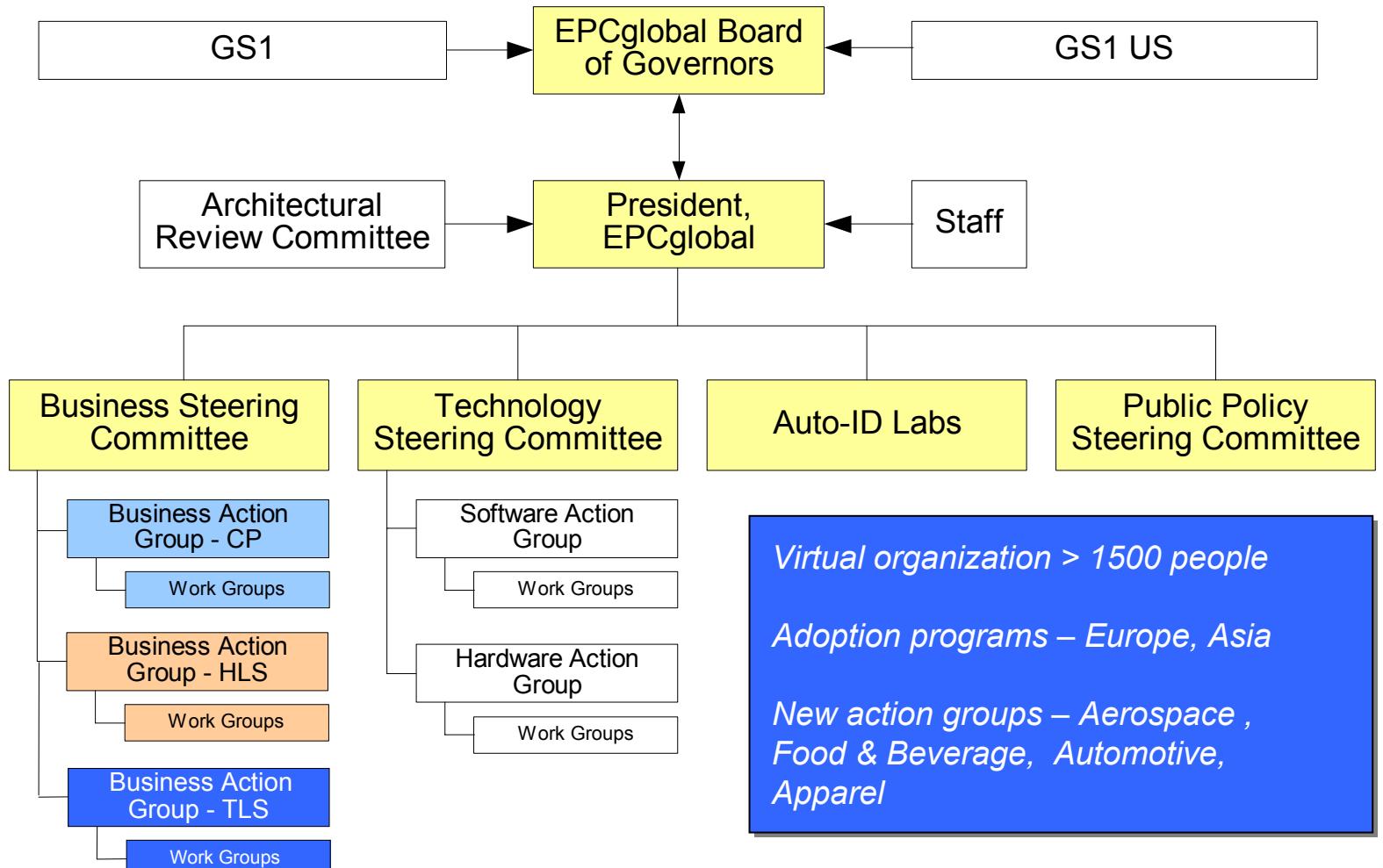
- Momentum is developing rapidly in new sectors



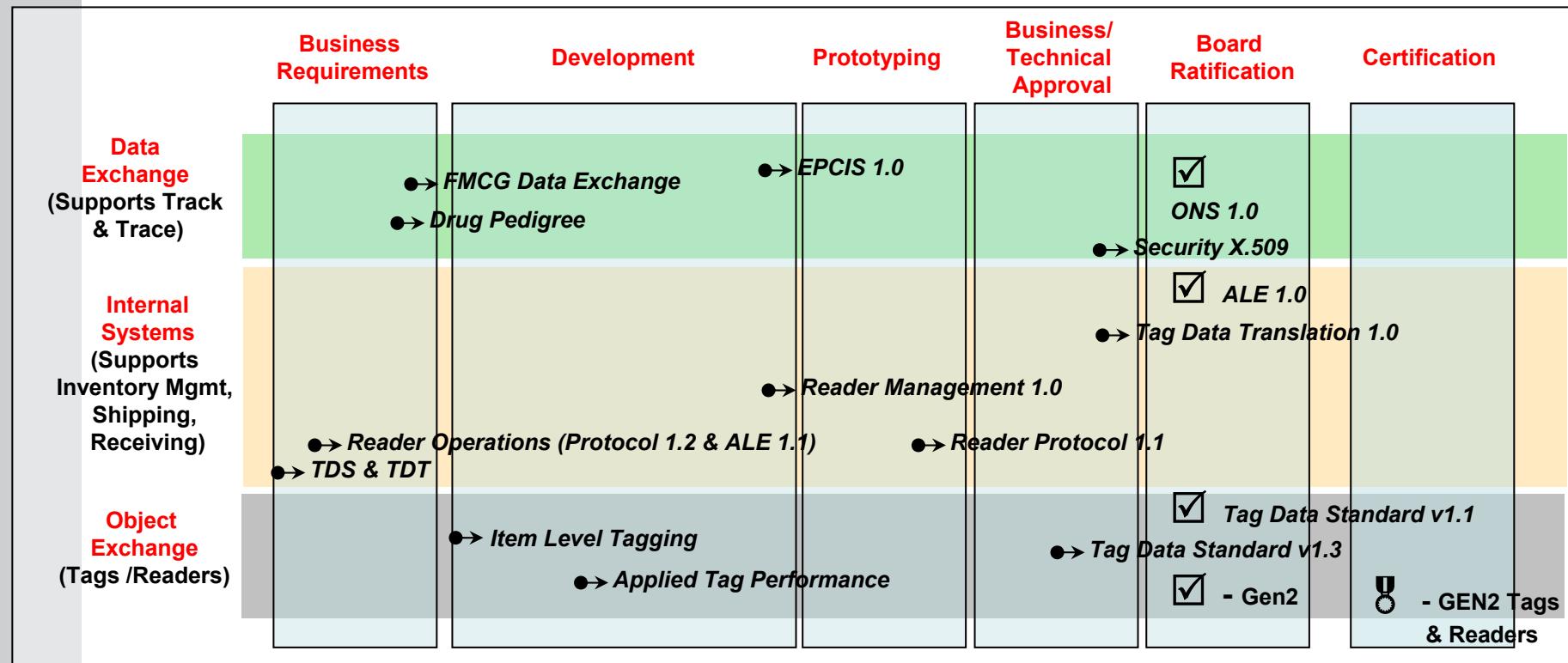
Example shows split of EPCglobal US end user membership

EPCglobal US end user membership
Powered by GS1

EPCglobal Organization

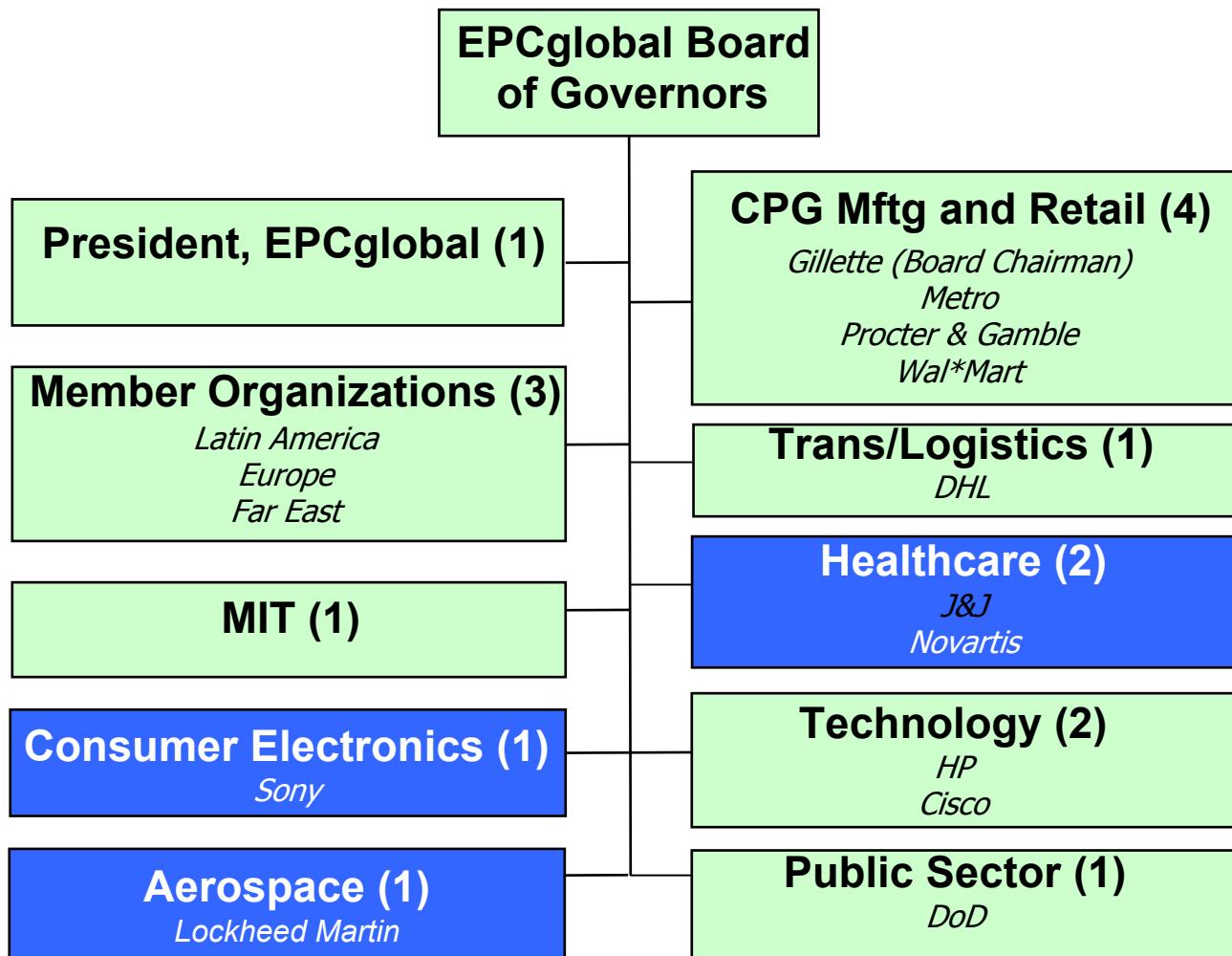


Overview of Standards in Progress, January 2006



↔ **Industry Alignment** ↔
↔ **Reduced Complexity** ↔
↔ **Lower Cost** ↔

EPCglobal Board of Governors



EPCglobal research partners – Auto ID Labs

- Cambridge - UK
- MIT – USA
- Adelaide - Australia
- St. Gallen – Switzerland
- Fudan – China
- Keio – Japan
- ICU – South Korea





Auto ID Labs Relationship

- New organizational structure and leadership for Auto ID Labs
- Stronger linkage to Auto ID labs and research planning through:
 - Sanjay Sarma (MIT) member of Architectural Review Committee (ARC), member of EPCglobal Board of Governors
 - John Williams (MIT) member of ARC
 - Elgar Fleisch (St. Gallen) member of BSC (Business Steering Committee)



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Looking into the future.....



Challenges and Opportunities going forward...

- Business Justification
 - ROI
 - Use cases
- Information Sharing
 - Proprietary solutions
 - Legacy constraints
 - Lack of trust
 - Existing revenue models for information
- Alternative Technologies
- Security
- Sensors
- Active Tags
- Intellectual Property
- Public Policy



In summary...

- *EPCglobal community....from hope to hype to implementation.*
 - The EPCglobal community grows stronger every day
 - Life is becoming more complex.... but this is a good sign!
 - Physics and standards challenges are being overcome
 - Prices are going down
 - The benefits of “visibility” are starting to be realised
 - The community has moved decisively from preparation to implementation

The race for business benefits and competitive advantage is on!!