



papiNet

papiNet Update: Enabling the Supply Chain in an Electronic World.

The Global Electronic Standards Initiative for the Paper and Forest Products Industry

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Vancouver, Canada



- **Background**
 - Goals, Global Membership, Organization
- **papiNet Standard**
 - What is the standard?, Historical Perspective
 - What is included in a version of the standard?
- **Why Standards and Collaboration?**
 - Who's Implementing and What are the Benefits
- **Future Direction**
 - 2003 Scope
 - reaching out to other verticals, industries
 - implementations and Segment Industry Groups (SIGS)



- A global paper and forest products industry e-Business initiative.
- A set of standard electronic documents that facilitates the flow of information among parties engaged in the buying, selling, and distribution of paper and forest products.
- *Enabler* for collaborative electronic business using the internet.



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Improve the efficiency of the paper & forest products supply chain and remove cost by:

- Enabling collaboration
- Documenting standard business processes
- Improving communications
- Reducing the cost of electronic communications



Facilitation of Goal

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- **To increase efficiencies in transaction and marketplace activities through**
 - documented business processes, with
 - Supporting standard XML messages, and
 - consistent data definitions, common terminology and formats
 - “real-time” exchange of information through the internet
- **To ensure that the standards are interoperable**
 - Between trading partners in the paper and forest products industry.
 - Between trading partners in other industries
 - ebXML envelope
 - Engage other standards initiatives
- **To provide standards that are open and freely available**



papiNet Europe Membership

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- Ahlström
- AssiDomän
- Burgo
- ENCE
- EPSMA (Label Stock)
- Espresso
- Fedrigoni
- Holmen Paper
- International Paper
- Kappa
- Korsnäs
- Lecta
- Mayr-Melnhof
- Metsä Serla (M-real)
- Mondi
- Myllykoski
- Norske Skog
- Portucel/Soporcel
- Sappi
- SCA
- Smurfit
- Södra
- Stora Enso
- UPM-Kymmene/Haindl
- WoodXML (formerly XMLSaw)



papiNet North America Membership

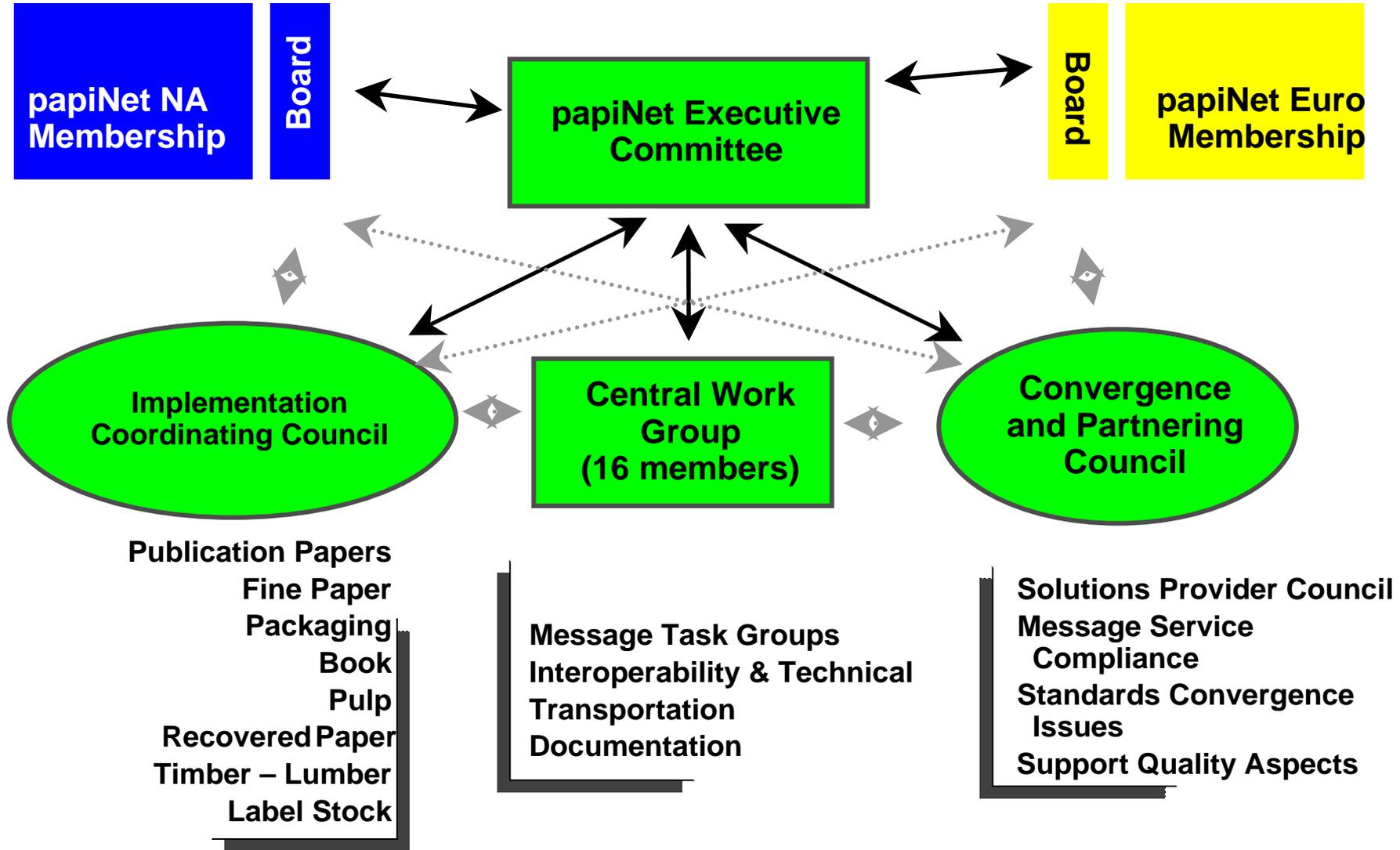
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- Abitibi-Consolidated Inc.
- Advance Magazine Publishers
- Bowater America Inc.
- Brown Printing Company
- Dupont
- ForestExpress
- G+J USA Publishing
- Glatfelter Company
- International Paper Company
- Kruger
- Lands' End
- Madison Paper Industries
- MeadWestvaco Corporation
- Perry Judd's Inc.
- Quad Graphics Inc
- Quebecor World
- R. R. Donnelley
- Sappi Fine Paper, NA
- Seeburger Inc
- SP Newsprint Co.
- Stora Enso NA
- Tembec
- TietoEnator Majiq
- Time Inc
- UPM-Kymmene
- Weyerhaeuser Company
- XBITS (Book Industry)



papiNet Global Organization

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What is the papiNet Standard?

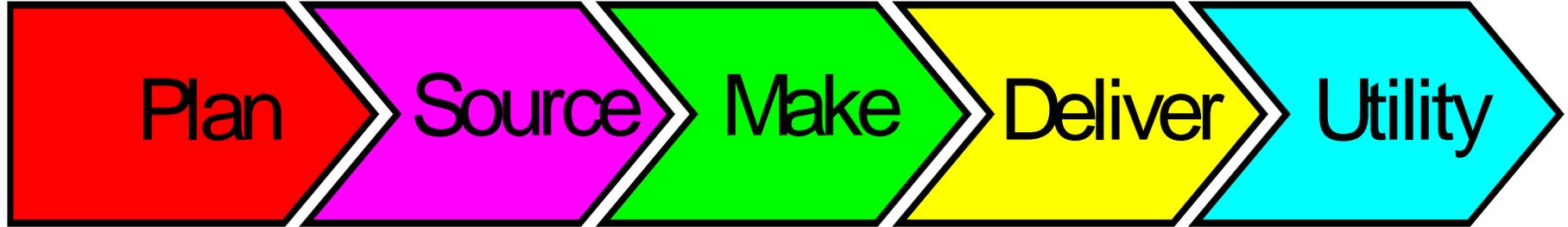
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- **Set of common electronic formats and terminology for the paper and forest products industry enabling supply chain efficiencies**
 - Designed to facilitate real time exchange of information between business partners
 - Business Process Categories:
 - Basic Order Fulfillment
 - Supply Chain Management
 - Improved Work Flow Processes
 - Routine Work Reduction
 - Product Performance & Quality



Supply Models

papiNet messages can be categorized according to the Supply-Chain Council's, Supply-Chain Operations Reference (SCOR) model



- Product Attributes
- Planning

- Request For Quotation
- Availability
- Purchase Order
- Order Confirmation
- Call-Off
- Order Status
- Inventory Status

- Product Quality
- Usage
- Inventory Change
- Product Performance

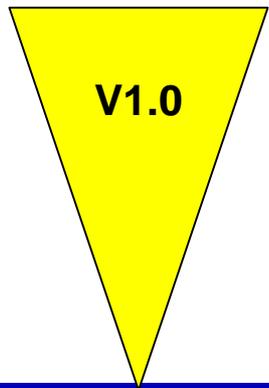
- Delivery Message
- Goods Receipt
- Invoice

- Credit/Debit Note
- Business Ack
- Information Request
- Complaint
- Complaint Request

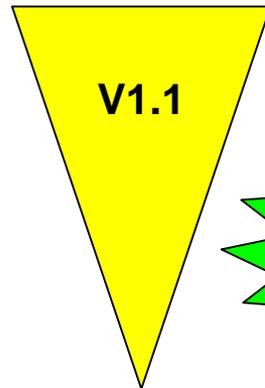


Historical Perspective

Purchase Order	RFQ	Usage	Availability
Order Confirmation	RFQ Response	Order Status	Planning
Call Off	Goods Receipt	Inventory Status	Product Performance
Delivery Message	Credit Debit Note	Inventory Change	Product Quality
Invoice	Business Ack	Information Request	Complaint
		Product Attributes	Complaint Response



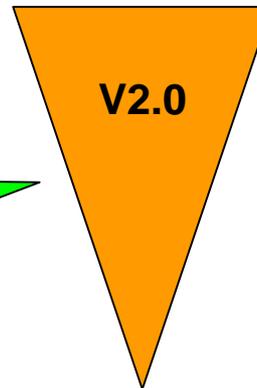
V1.0



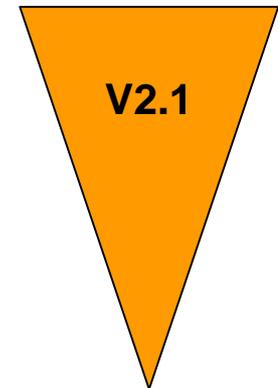
V1.1



**Schema &
ebXML
envelope**



V2.0



V2.1

**June 2001
Release**

**Feb 2002
Release**

**August 2002
Release**

**March 2003
Release**



What's Included in a Version

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- **Business Process**
 - Supply Chain Vision
 - Reference Scenarios
- **Standard**
 - Message Documentation
 - Glossary of Terms
 - Schema
- **Interoperability Guidelines**
 - ebXML Envelope Documentation
 - “Rules of Engagement”
- **Stylesheets**
 - Generic browser based view of the documents
- **Press Release**
 - Industry Review
 - Publication
- **Sample Scenario**
 - XML Samples
 - Conversational approach
- **Implementation Guide**
 - The “how-to” guide
- **Release Notes**
 - What’s changed
- **ISS Tool**
 - Facilitates mapping of messages to backend systems

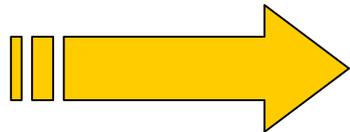


Why Standards?

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Standards are fundamental to an efficient supply chain:

- Enable timely, efficient and effective communications
- Avoid costly/non-value added translation activities
- Enable fast and widespread connectivity
- Avoid “one-off” custom connections



Standards enable collaboration



The Need for Collaboration

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- Challenging economic and market conditions
- An inefficient supply chain
- Significant “money” in the supply chain
- Our customers need and expect more from us



The Need for Collaboration

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"90% of enterprises that fail to provide visibility and supply chain automation by 2004 will lose their status as preferred suppliers."

**Karen Peterson,
Director, Gartner Inc.,
August 2002**



Other Industry Benefits From Standards

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Industry

- Electrical safety
- Quality systems
- Internet
- Electronics Supply Chain
- Paper & Forest Products Supply Chain

Standard

- UL (Underwriters Labs)
- ISO
- HTML
- RosettaNet
- papiNet



Why Standards?

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Intel sees a \$500 million long-term opportunity to reduce supply chain costs through collaboration and use of RosettaNet standards:

- Collaborative demand forecasting
- Order management
- Shipping/receiving logistics
- Invoicing
- Payments
- Replacement of EDI

—Source: InformationWeek 12/9/02



Why Standards?

Printing Paper Inventory in Supply Chain

Total Inventory: 611,872

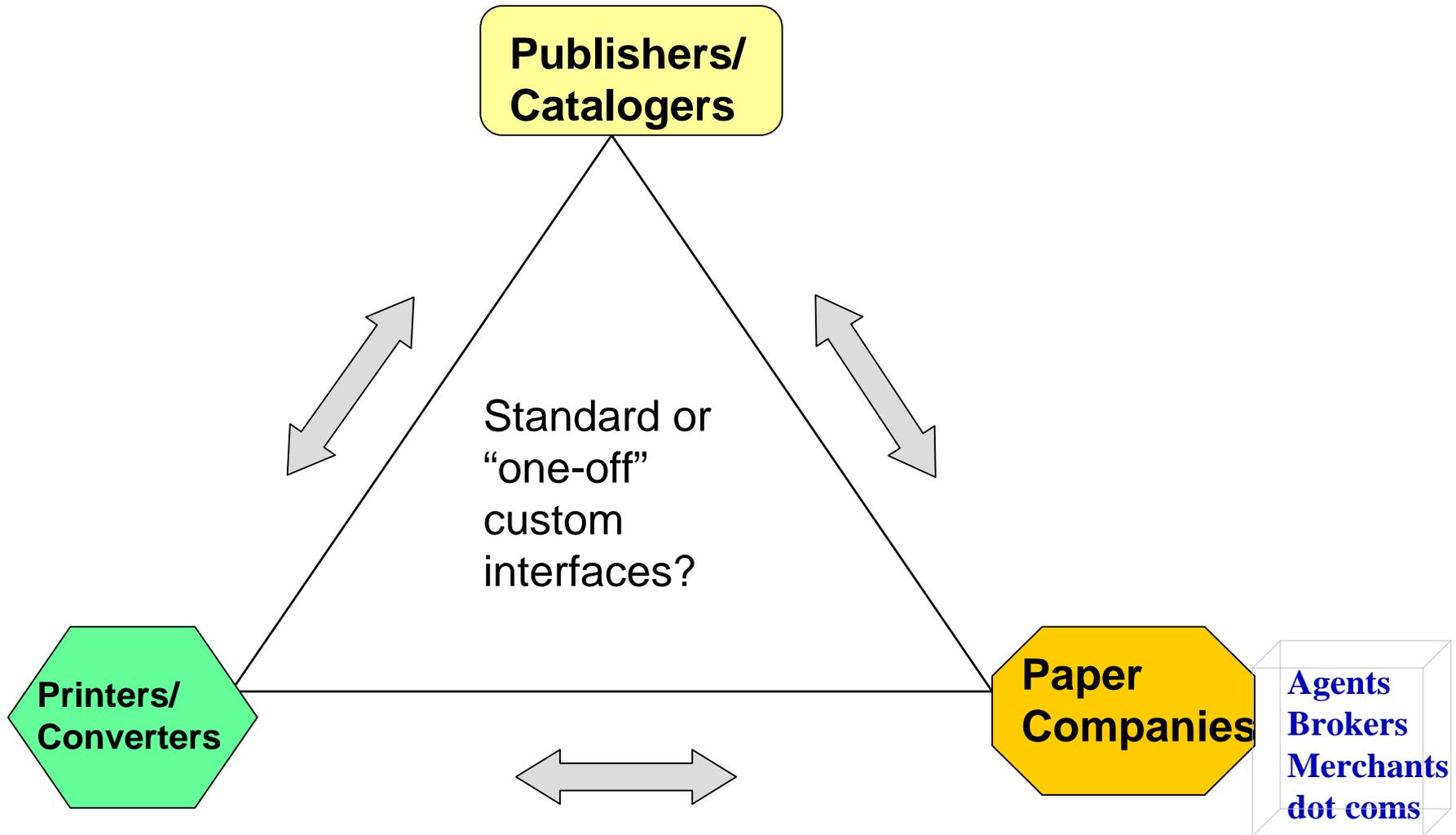
Total Consumption: 73,357

- * Figures are monthly totals in short tons
- * Companies reporting - 8
- * Companies reporting consumption - 3



Our Choice

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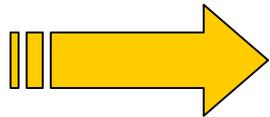
Which is better for our supply chain?



Benefits for the Supply Chain

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- Improved customer satisfaction / service
- Reduced I.T. infrastructure investment
- Reduced administrative costs
- Faster communications
- Better information for decision making



**A more efficient supply chain
keeps print viable!**



Now Add on Collaboration Benefits

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- **Supply Chain Collaboration**
 - Cost reductions & Productivity Improvements
 - waste reduction, reduce working capital requirements, improve transport, opportunities to reduce internal resources
 - Supply Chain visibility
- **Value Chain Collaboration**
 - Emphasis on effectiveness and collaboration
 - An operating strategy linking the enterprises in the chain
 - proactive prevention of problems, performance feedback
- **Requires Trust, Time, and Transparency**
- **Requires Collaborative Processes**
- **Implies Potentially Re-engineering of Processes**



ROI Quotation

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“The Industry has not done its best over the last 10-15 years to give return on capital invested.

papiNet is one of the keys to driving out cost in the way business is done.”

LH Puckett

VP Coated Division

International Paper



Future Direction: papiNet Scope – 2003

- **Focus on implementations & collaborations**
 - Create Segment Implementation Groups to guide/aid implementations
- **Further Involve all key market segments across the pulp, paper, and paperboard industry including**
 - Containerboard
 - Book Industry
 - Recovered Paper
 - Label Stock
 - Building Materials - Timber / Lumber
 - V2.2 Release - January 2004; Industry Review Oct 2003
- **Reach out to the Transportation Industry**
- **Engage potential Solutions Providers**

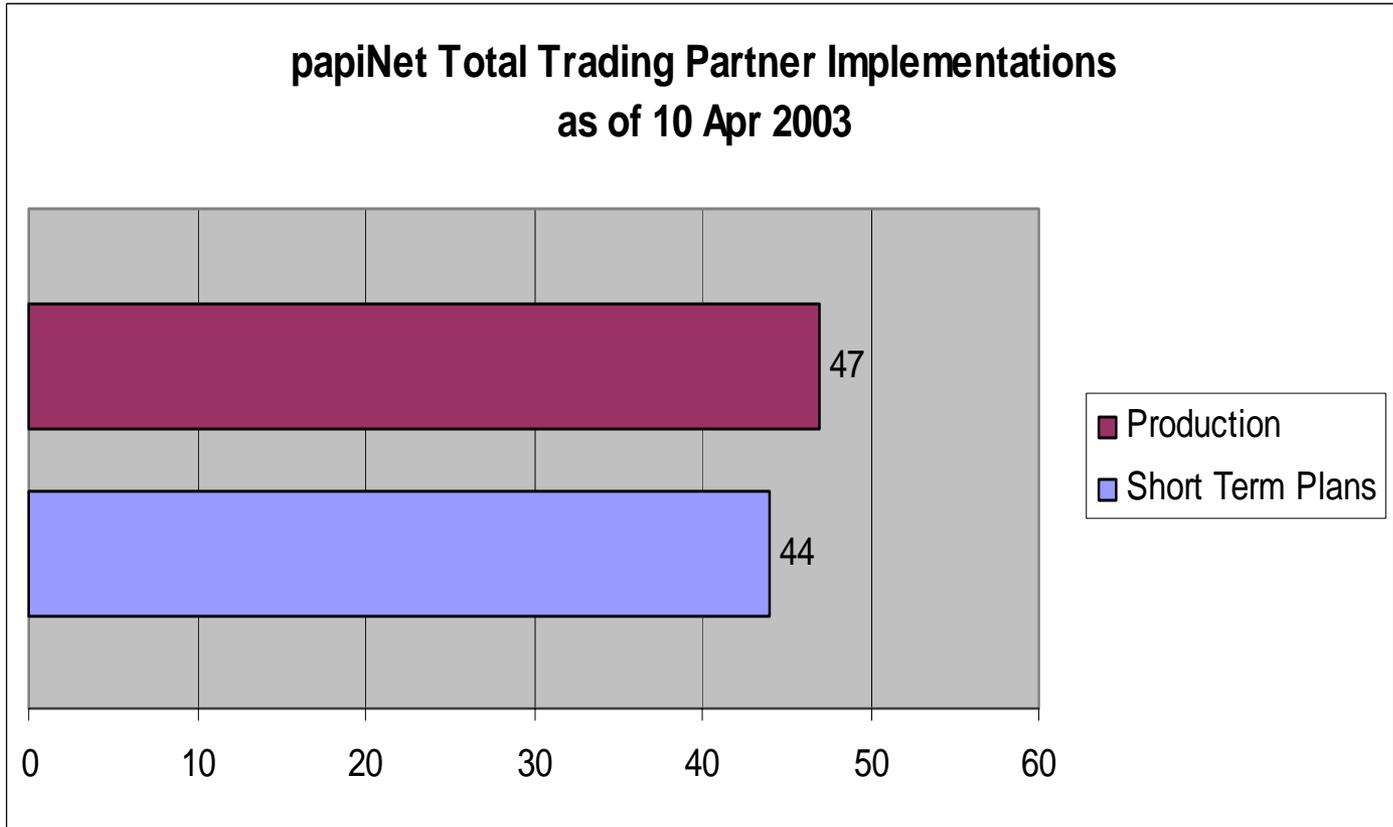


- **Implementation benchmark survey completed April 2003**
- **90+ trading partners engaged in implementation**
- **2003 goal**
 - All 90 in production
 - 50 more in testing
- **Quarterly surveys throughout 2003**



Total Live and Planned Implementations

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Who's Live or Testing in 2003

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- Axel Springer
- Abitibi-Consolidated
- Bowater America
- Brown Printing
- Burda
- Burgo
- ForestExpress
- Glatfelter
- Holmen Paper
- International Paper
- Land's End
- Madison Paper
- Mayr-Melnhof
- MeadWestvaco
- News International
- Norske Skog
- Perry Judd's
- Quad Graphics
- Quebecor World
- R. R. Donnelley
- Sappi
- SCA
- Smurfit
- Södra
- SP Newsprint
- Stora Enso
- Tembec
- Time Inc.
- UPM-Kymmene/Haindl
- Weyerhaeuser



Segment Implementation Groups (SIGs)

- Groups Formed:
 - Publication Papers (NA)
 - Publication Papers (Europe)
 - XBITS (NA Book Manufacturers)
 - Fine Papers (Europe)
 - Packaging (Europe)
 - Timber / Lumber (Global)

- Groups Forming:
 - Fine Papers (NA)
 - Packaging - Containerboard and Paperboard (NA)
 - Label Stock (Global)
 - Recovered Paper (Global)



Segment Implementation Group (SIG) Activities

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- Enhancements to the papiNet Standard
- Understand benefits of integration and use of the standard
- Develop ROI information
- Develop typical business cases
- Document best practices for use of the standard in this channel
- Network and share implementation information
- Collaborative web site
- Market standard to the entire segment



papiNet Transportation

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- Engage the CIDX standards group in the enhancement of their transport and logistics messages to incorporate paper and forest products industry requirements.
- Signed collaborative agreement completed early 2003
- Initial pilot of one message – Shipment Status – for Q2 2003
- Explore the opportunities to participate with CIDX Convergence and Partnering group in monitoring the XML global cross industry standards landscape
- January 2003 - Launch in Vienna (EU)
- March 2003 - Launch in New York (NA)
- April 2003 - Workshop in Hamburg
- May 2003 - Engage CIDX Change Control Process



- The papiNet organization is committed to providing the means to utilize electronic business messages over the Internet to improve supply chain efficiency and effectiveness
- The papiNet Standard provides the XML messages, tools and extensive documentation to do this
- The Transport Initiative will broaden the scope of where improvements can be made
- Introducing more industry segments will enrich the standard and broaden its acceptance and use
- Fully engaged in supporting the industry and our goals of driving out cost from the supply chain and doing business with our customers



We make it easier to get started

papiNet

- Visit our web site at www.papinet.org
- Download for FREE:
 - Comprehensive documentation
 - Implementation Guide
 - Examples, use cases
 - papiNet Message Schemas
- Join and participate in developing business models for 21st Century Paper and Forest Products Industry!
- **Contact us:**
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