



# CGAP Update

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CWG Meeting  
05/19/2004



# CGAP Development Support

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2004

- January: New maintenance team for eRA
- April: New development contract issued
- May: New development team in place
- June: ebXML Registry evaluation (tbd)



# Update on Fall Pilot 2003

	<b>Unscored: Application Judged Non- competitive</b>	<b>Pending Council Review</b>	<b>Pending Award</b>
<b>CGAP R01 and R21 Applications (13 total)</b>	<b>6</b>	<b>6</b>	<b>1</b>
<b>Paper-based R01 and R21 Applications</b>	<b>4921</b>	<b>7245</b>	<b>711</b>



# March 2004 Pilot

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- March 1 Receipt date
  - Limited pilot for Modular Renewals
  - Many bug fixes and enhancements
  - Learning experience for NIH, Service Providers, and grantee community
  - Better processes
  - No paper



# CGAP Status Update

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- June 1 Receipt date
  - Modular grants with no limits on numbers
  - All Service Providers participating
- July 1 receipt date
  - Unlimited number of modular renewals and revisions
  - Handful of full budget grants (Pilot 1)



# CGAP Status Update

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- Oct–Nov 2004 receipt dates
  - Unlimited modular simple grants
  - Full budget grants, controlled number in Pilot 2
  - Grants.gov Pilot
  - Other improvements (image, corrections, supplements)
- January 2005
  - Full production on modular grants (new, competing, revisions)
  - Full budget grants in Pilot 3



# 4 Steps to Production

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- Pilot 1: Live test, 1 - 8 applications
- Pilot 2: Limited, < 30 applications
- Pilot 3: Unlimited numbers (assuming no major changes or problems from Pilot 2)
- Production

**Repeat for Next Set of Features**



# Some of the Issues Faced

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## Operational procedures and support

- Technical support for Service Provider
- Support to PI, SO, and others
- Business process and policy changes
- Corrections after submission
- Coordination with Grants.gov
- Technical architecture





# Business Processes

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- After receipt: no more paper copy
  - Impact on all processes including IC internal processes
- Corrections and JIT information after initial receipt
  - Currently not codified, only guidelines
  - How to handle it, rules ?
- Re-generate the image after receipt
  - Add grant number, add corrections to data
  - What is the image of record if NIH changes it?
  - Need to handle versions of applications
- Adding other transactions
  - NGA
  - FSR



# Tech Architecture Improvements

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- Testing Environment for Service Providers
  - Production V 1.0 - Released - Oldest
  - SP testing V 1.1 - Stable, NIH tested
  - NIH testing V 1.2 - Normal test env
  - NIH Development V 1.3 - Newest
- Fail-over architecture for CGAP
  - For January have to make sure we have some redundancy built in



# Outreach and Managing Expectations

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- How to manage Grant types submissions to match our capabilities?
- Clarify and communicate the Service Provider responsibilities and their certification
- Enhance communications with applicants and stakeholders
  - Applicant participant package
  - Improving the Web site
  - Outreach to NIH community
- Make the experience positive for the entire community



# Coordination with Grants.gov

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- Expecting draft 424 and Research and related schema
- Developing NIH-specific part of application
- Expecting a common standard: ebXML
- Business validations not done by Grants.gov
  - Do we accept applications with less validations and deal with it *or*
  - Reject applications if NIH rules are not met?
  - Error message handling?
- How to control applications types on Grants.gov ?
- 2 XML schemas will co-exist



# Next Steps: Looking Ahead

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- Managing many types of transactions
  - Some with multiple versions
  - Outgoing as well as incoming
- With multiple business partners
- Each with different capabilities

# The view from the field



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
National Institutes of Health

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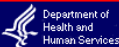


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U.S. Food and Drug Administration



United States Department of Agriculture

May 14, 2004

# Why a Standard for Fax?



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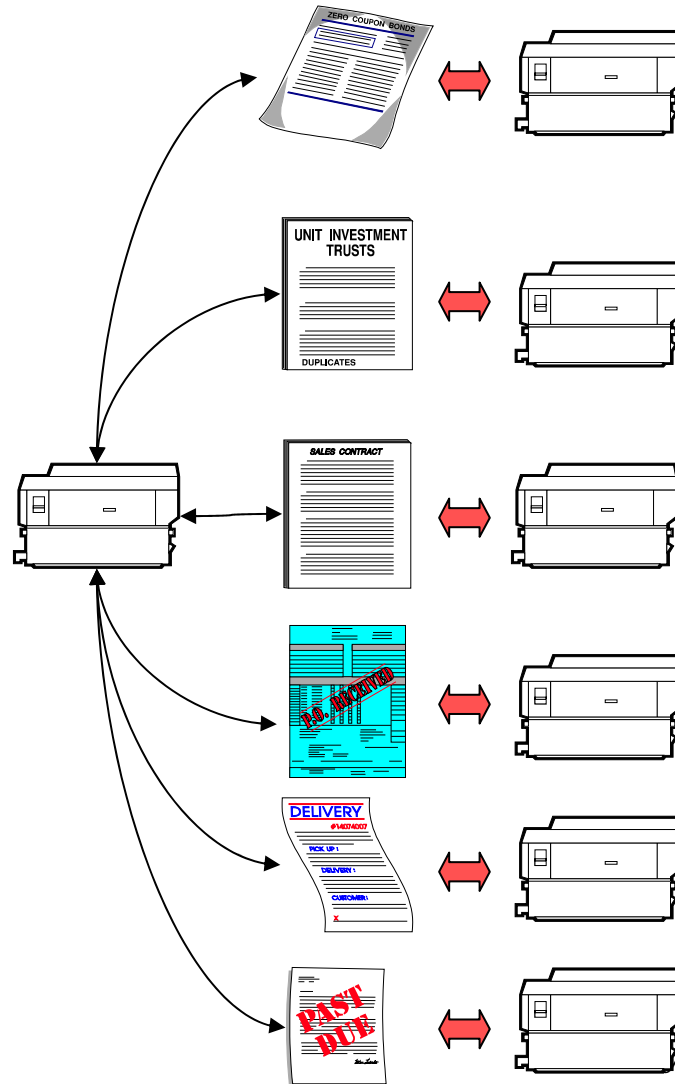


USDA

United States Department of Agriculture

July 14, 2004

# One Communication Standard



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
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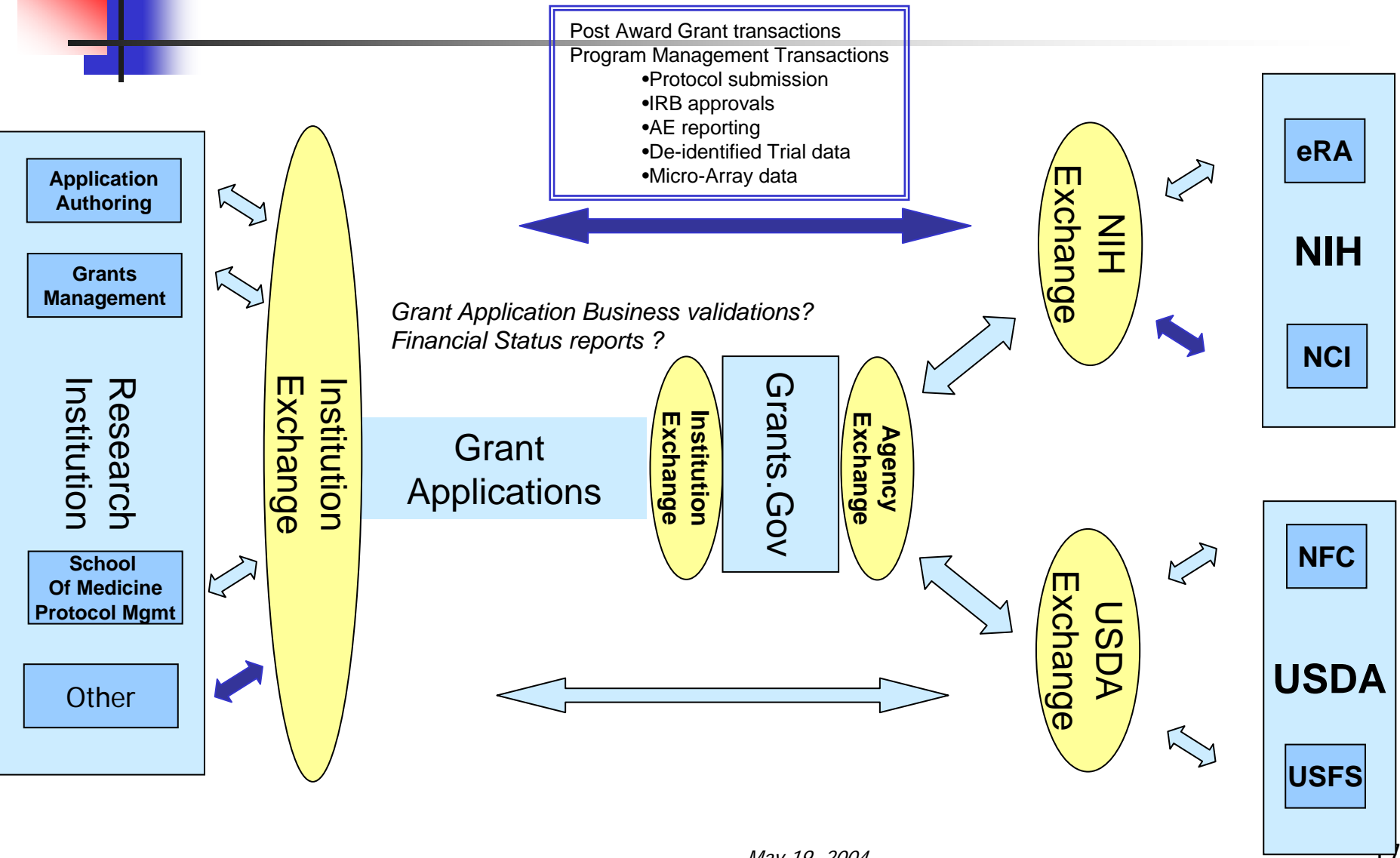


United States Department of Agriculture

19, 2004



# Target Topology





# ebXML

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- Standard from UN/EDIFACT and OASIS
- Version 2.x—more than an exercise
- “Learned” from older standards
  - Subject-matter domain agnostic
  - Formal information model
  - Compatible with modern technologies
  - Open
- Defined in XML and UML
  - Interpretable by a computer
- Has a strong following and other standard support
  - Compatible with **HL7 transactions**

[ebXML.org](http://ebXML.org)



# electronic business XML

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- ebMS** ebXML Messaging Services – component that implements the messaging interchange specifications.
- CPP** Collaboration Protocol Profile – used with messaging services to configure access to an ebMS system.
- CPPA** Collaboration Protocol Profile and Agreement; OASIS TC (technical committee) defining standards for business agreements for interchanges. <http://www.oasis-open.org/committees/ebxml-cppa/>
- CCSD** Core Component Supplemental Documents
- BPSS** Business Process Specification Schema; defines a business process to achieve a physical business interchange between parties
- Registry** An ebXML Registry component conforming to the OASIS ebXML Registry specifications.
- IIC** Implementation, Interoperability and Conformance; OASIS TC (technical committee) defining test suites for ebMS components.
- Core Component** Conceptual term for nouns and collections of nouns (BIEs – business information entities) that represent primitive business units of information



# Road to Implementation: Bottom Up

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- Messaging
  - Basic message exchange plumbing
- Registry and Collaboration Protocol Profile
  - Record, manage and publish trading capabilities
- Collaboration Protocol Agreements
  - Discover, interpret, match up and execute trading agreements
- Business Process Models
  - Formal definitions of business processes
  - Automated execution of these processes



## Next Steps:

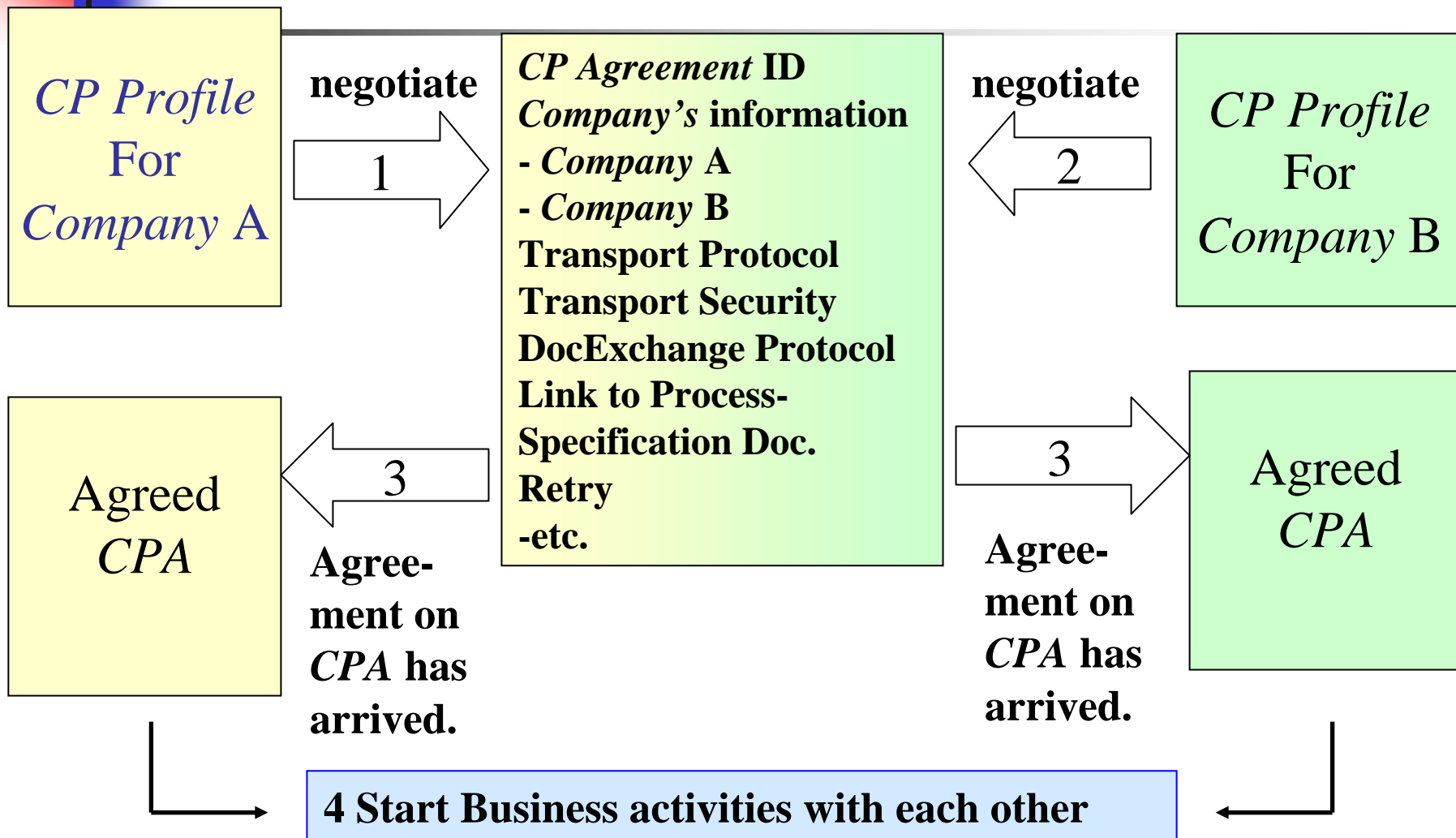
# CGAP Exchange Buildout

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- **Buy or Build** the Registry, CPP, TPA capabilities
  - Evaluate latest packages available for ebXML standard implementation
  - Prototype candidate implementations
  - Make a recommendation to eRA Mgmt
  - → *Evaluation task*
- **Implement** system to system exchange capabilities
  - → *Build out of Exchange task* → *Exchange SOW 2*

# Overview of *Collaboration-Protocol Agreements (CPA)*

*CPA*

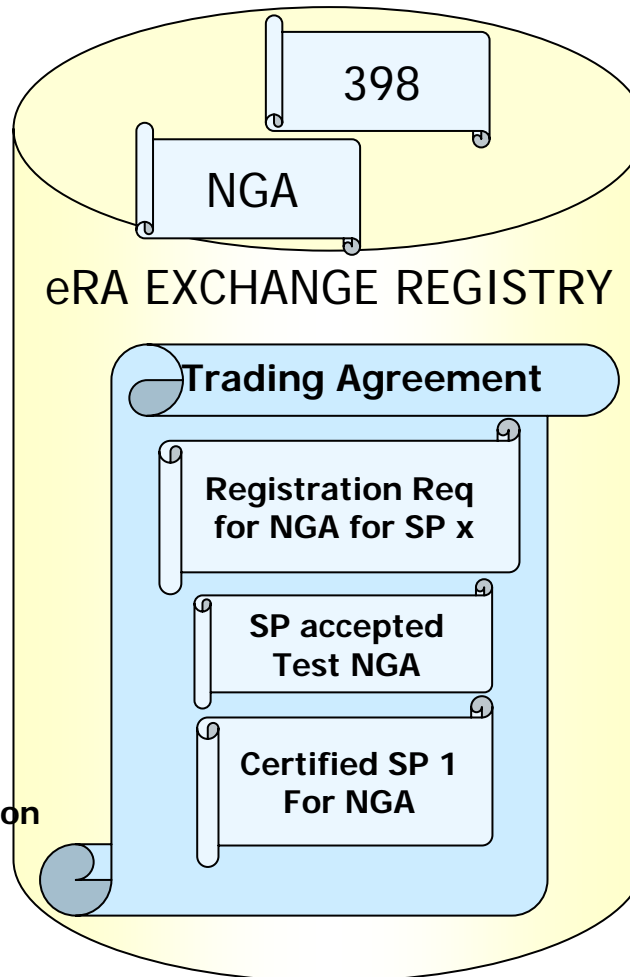


# eRA Registry

## Scenario for Service Provider

- SP discovers new service in eRA Registry
- SP examines the terms of the service
- SP fill in service pre-requisites (get an account, etc)
- SP build and test their own systems for this transactions
- SP sets up their system to receive a test transaction from NIH
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- SP sends a transaction to register for the new service
- The SP receives the message provided by NIH and acknowledges according to pre-established convention
- SP receives conformation of certification

*Transactions Start*



## Scenario for NIH

- NIH posts transaction definition and trading options
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- NIH receives a request for registration.
- NIH checks the validity of the request
- NIH Acknowledges that the request is accepted
- NIH sends a transactions according to requested parameters
- NIH receives confirmation of receipt
- NIH marks the trading partner as certified for this type of transaction.
- NIH sends certification confirmation

*Transactions Start*



# Automated Operations

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- Registry of transactions at NIH
- Automated certification
- Single authentication at NIH
- Self-service testing
- Self-service registration of Service Provider capability
- ***Single infrastructure for everybody***





# Questions

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- Is there support for ebXML as a standard
  - For messages ?
  - For registry and repository ?
  - For trading agreements ?
- Should NIH and Grants.gov commit to ebXML?
- Concept of reference implementation at SP site
  - Provided by NIH
  - Along the lines of open source software
    - (shared, free, SP can contribute and put back into pool)