



The Office of the National Coordinator for  
Health Information Technology

# Certificate Interoperability S&I Framework Initiative

**Final Report**

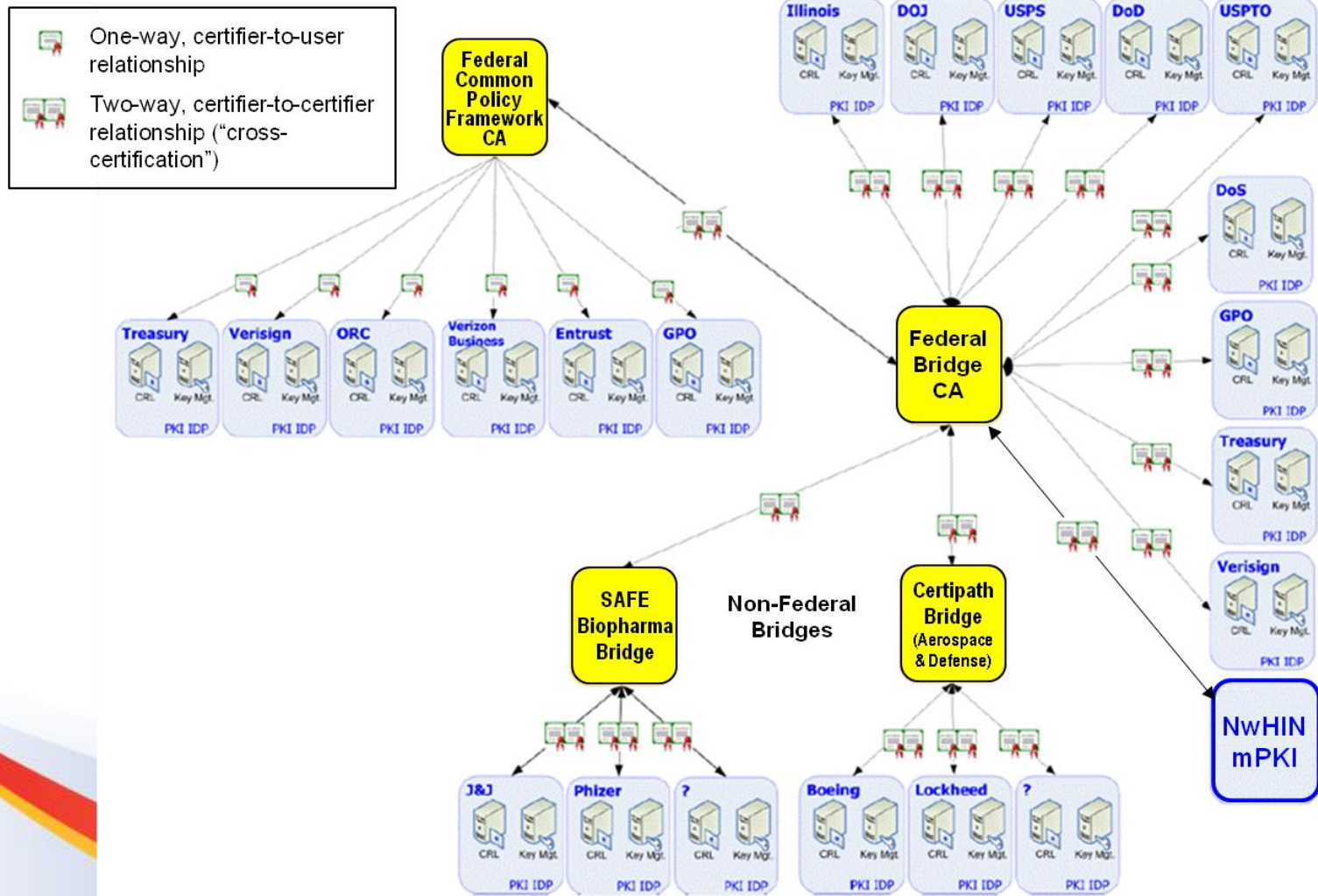
August 17, 2011

# Task for the S&I Framework

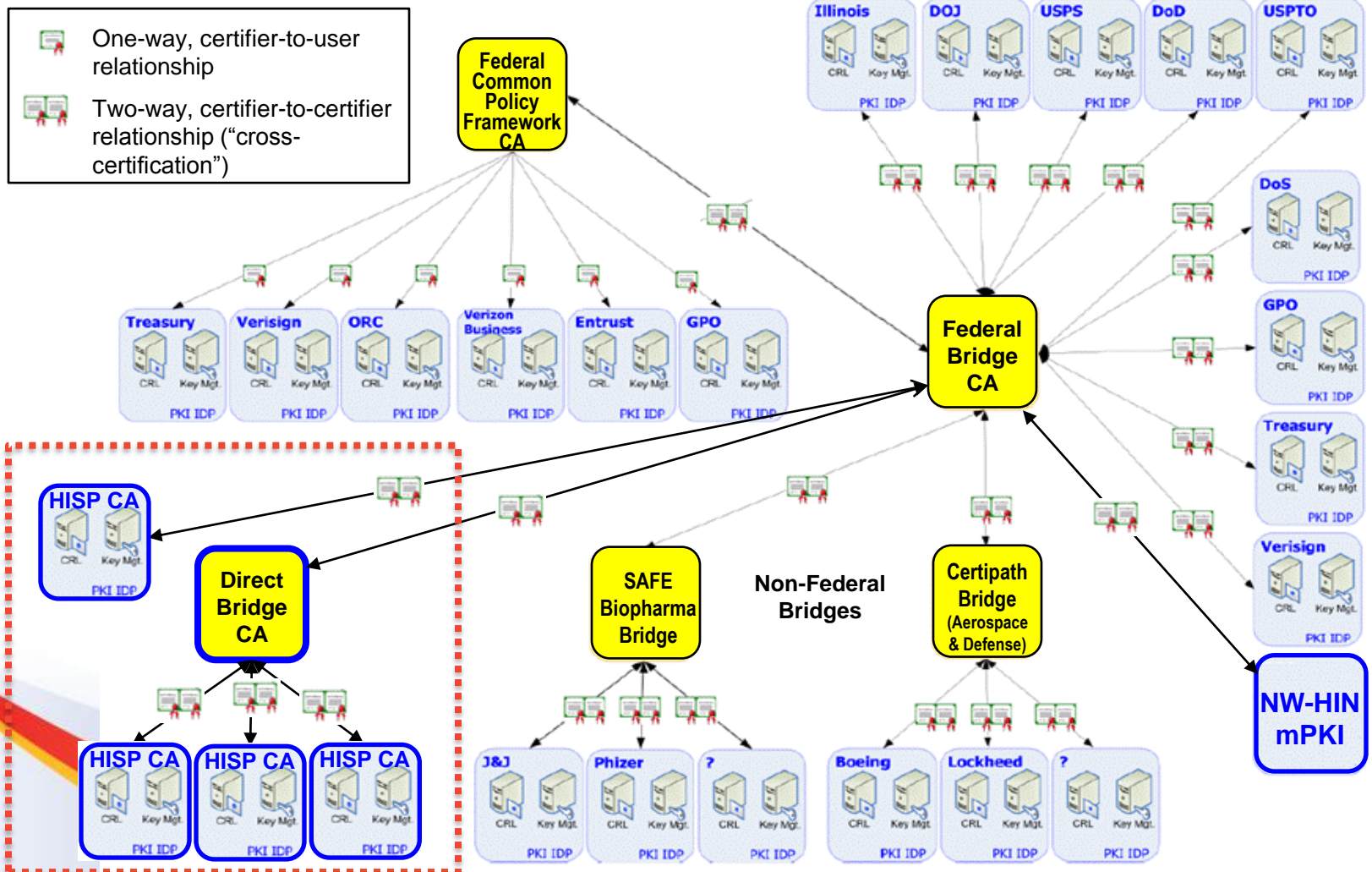
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- Recommendation from the HIT Standards Committee to ONC:
  - “To enable Direct users to exchange health information with federal health agencies, the HIT Standards Committee recommends that the ONC investigate architectural and operational alternatives for cross-certifying Health ISPs (HISPs) with the Federal Bridge Certificate Authority, including an examination of potential benefits and implications on cost, market dynamics, and complexity”

# Federal PKI Architecture\*



# Notional Architecture with Direct Cross-Certification (as presented to HITSC)



# Certificate Interoperability Analysis Process





# FBCA Organizational Certificates

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- Current FBCA policy does not issue organization-level certificates, as required by Direct – nor does it address the policies and procedures to verify organizational identities
- ONC staff has met with GSA staff to discuss this gap in policy
- GSA indicates that development of policy for organization identity verification will take 6 – 9 months
- ONC staff will coordinate with GSA on the development of these policies
- The Direct Project Rules of the Road Work Group is developing guidance to Direct Project to ensure that any certificates used in the interim will align with anticipated FBCA policy and comply with commercial best practice

# Options for ONC's role

In light of the gap in the availability of organizational certificates, we investigated what support ONC could provide

- **Current state:** Direct participants identify and assess cross-certified CA's to make a purchasing decision
- **ONC provides governance and facilitate market competition to meet needs:** ONC issues guidance that goes beyond the FBCA requirements for certificates and identifies vendors that comply with certificate guidance and are cross-certified with FBCA
- **ONC charters a Bridge:** ONC directly (or contractually) establishes a Bridge that is chartered by the Federal Bridge
- **ONC negotiates an agreement with CAs to obtain discounted certificates:** ONC issues an RFP to select one or more vendors that are cross-certified and meet any additional requirements

# Option Comparison Summary

Option for ONC	Pros	Cons
<b>Current State</b>	<ul style="list-style-type: none"> <li>• Rapid to deploy</li> <li>• Low complexity and low overhead for ONC</li> </ul>	<ul style="list-style-type: none"> <li>• No healthcare root</li> <li>• Higher burden on purchaser to research and acquire CA options</li> <li>• Uncertain impact on certificate costs</li> </ul>
<b>Provide Governance and facilitate Market Competition</b>	<ul style="list-style-type: none"> <li>• Possible limited number of healthcare roots</li> <li>• Purchaser can rely on ONC vetting of vendors</li> <li>• Can require compliance with healthcare policies that go beyond FBCA</li> </ul>	<ul style="list-style-type: none"> <li>• Time and resources to vet CA's</li> </ul>
<b>Charter a Bridge</b>	<ul style="list-style-type: none"> <li>• Healthcare root can be established</li> <li>• Can require compliance with healthcare policies that go beyond FBCA</li> <li>• Purchaser can rely on ONC vetting of vendors</li> </ul>	<ul style="list-style-type: none"> <li>• Time and resources to set up and maintain a bridge</li> <li>• Uncertain impact on certificate costs</li> </ul>
<b>Negotiate Discounts with CA's</b>	<ul style="list-style-type: none"> <li>• Possible limited number of healthcare roots</li> <li>• Can require compliance with healthcare policies that go beyond FBCA</li> <li>• Purchaser can rely on ONC vetting of vendors</li> <li>• Reduced certificate costs for purchasers</li> </ul>	<ul style="list-style-type: none"> <li>• ONC responsibility for procurements and contract management</li> <li>• Likely to reduce the number of vendor choices</li> </ul>



# Implication of Findings

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The findings of this initiative suggest that ONC can pursue the following actions:

- Work with GSA to ensure that policies regarding authentication of organizational identity and issuing organizational certificates are developed on an expedited timetable
- Ensure that in the interim Nationwide Health Information Network (including Direct Project) participants acquire and use certificates that align to the maximum extent possible with the Federal PKI policies
- Once Federal policies for authentication of organizational identity are in place, ONC should ensure that Nationwide Health Information Network (including Direct Project) participants have a process for an orderly migration to certificates that are issued by Certificate Authorities cross-certified with the Federal Bridge
- Pursue a longer term strategy to establish a Health bridge that is cross-certified with the Federal bridge

NOTE: For the entire CI report, click [here](#)