

# Interim Business Plan For InCommon *Draft 1*

## Background

In January of 2009, Internet2 and its LLC, InCommon, asked a group of community leaders to develop a three-year strategic plan, including recommendations on how best to organize the federation related to Internet2 governance and the overlapping activities of the Internet2 Middleware Initiative. That final document [InCommon Future Report and Recommendation, 1 July 2009] outlined the imperative for action but did not formally address a business plan. This document provides an overview of the interim business plan for InCommon. We call this an interim business plan because one of the critical components of the business plan is to hire a full-time executive director. We expect that the new executive director will work with InCommon Steering and Internet2 management to provide a fully structured plan that incorporates community input, as well as the outcomes of critical external events such as government adoption of InCommon technology.

This summer, recommendations set forth by the InCommon Future Group [see Appendix 3 for list], composed of community leaders from InCommon and Internet2 governance communities, outlined a broader role for InCommon, not only as an identity federation, but an organization to include new trust services and also the leadership and software development activities of the entire Internet2 Middleware Initiative.

The following *interim* business plan was developed by InCommon Operations Director John Krienke in consultation with Internet2 staffers Ken Klingenstein, Renee Frost, Ann West, Randy Frank, Jay Pflasterer, and Doug Van Houweling. Lois Brooks, Kevin Morooney, and Jack Suess of the InCommon Steering Committee also worked closely with John Krienke on the model. The team developed a spreadsheet model that allowed them to vary parameters such as number of members in a year and the annual participation fees. The model and key parameters such as annual membership fees were discussed in an InCommon Steering Committee meeting on September 14th to validate assumptions and identify the appropriate values for the model parameters.

Development of this business plan, and the importance of undertaking the actions described here, is underscored by the CIC letter to the Internet2 board. Subsequent discussions with CIC members highlighted two important considerations: current financial outlay for identity management and willingness to increase financial support for InCommon. First, individual campuses have already demonstrated considerable financial and strategic commitment to federated trust services for outsourcing applications. Federations save resources for campuses. Second, because of this strategic commitment, representatives from CIC and RUCS schools have expressed a willingness to increase their own support of InCommon's services and leadership. (See Appendix 3 for additional information.) As part of the resulting discussion it was decided that InCommon should move forward immediately with some aspects of the new business model, even while other areas are being analyzed, most notably by raising the annual membership rate for 2010 from \$1,000 annually to a tiered structure (see Appendix "Overview and Model").

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## Business Plan Focus

In the discussions of the InCommon Steering committee and Internet2 staff on how to make tangible progress on InCommon efforts, we identified two critical short comings that needed to be addressed: organizational leadership and working capital.

- Organizational leadership for business planning, management execution, partnerships, and communications and outreach to different stakeholders. InCommon needs a full-time executive responsible for this. This person would report to the Internet2 CEO and serve on the Internet2 management team.
- Working capital to allow InCommon to accelerate the progress of InCommon Silver and Bronze trust services and the launch of new services around digital certificates, training and consulting, and managed federations.

InCommon is a fast growing entity. As of September it has already surpassed the membership and revenue targets for the year. While growth brings revenue to simultaneously build infrastructure to support that growth *and* future growth, we request that Internet2 provide an investment line of credit to InCommon of \$1,200,000. The investment line of credit will be a loan to InCommon and will be repaid by the end of 2013. The funds will be drawn down to support activities that are tied to InCommon reaching specific metrics (e.g., number of members, launching new services, etc.). As mentioned above, research universities have expressed a willingness to increase their own annual investment in InCommon.

One aspect of this plan that should be mentioned is that through 2012 we ask Internet2 to maintain its present level of commitment to funding Middleware, which is approximately \$1.5 Million for staffing, travel, and support. This will provide a stable base for funding development. Through the one-time working capital investment mentioned above, InCommon will be able to leverage the current Middleware investment *and* rapidly deploy new services that are important to our community. In addition, InCommon will leverage additional funding for grants and in-kind participation from other countries. In fact, Shibboleth is a case in point of expanding international participation.

## Business Plan

The InCommon business plan focuses on four key services.

1. Continued support of InCommon "basic." This allows a participant to leverage the federated offerings of commercial and other service participants that don't require a high level of trust assurance. As we add more commercial service participants and some key groups such as EDUCAUSE this will be a compelling value for campuses.
2. InCommon Silver and Bronze. These new trust services support the needs of the government in providing a high level of trust assurance. They require institutions to

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demonstrate compliance through campus audits and will evolve to be important cornerstones in supporting research.

3. InCommon Certificate services. This is based on similar work being done in Europe. We have the opportunity to provide digital server certificates in a cost effective manner that saves universities money and could provide a cornerstone for new security services such as personal certificates and digitally signed email.
4. Operating other federations. We anticipate that many states or possibly other countries will decide that they would benefit from having their own federation. InCommon's expertise can provide federation services efficiently and effectively.

InCommon has doubled its participation since 2004. The business plan assumes that InCommon basic participants will grow accordingly:

2009 Actual	2010 Est.	2011 Est.	2012 Est.
165	265	390	740

The growth through 2011 focuses on bringing research universities into InCommon, working with some key consortia of private universities such as NWACC or the CLAC. We expect to begin working in 2010 with a few states, such as California, Texas, and Virginia that are interested in developing state-based federated services for all educational institutions they serve. The time lag in getting institutions up varies but is usually at least a year for small schools. As a result, these new members would come on-board in the latter half of 2011 or 2012 but to be conservative we assumed from a revenue perspective this will happen in 2012.

InCommon will closely partner with EDUCAUSE and Microsoft to promote the advantages of InCommon “basic” federation services. By 2012 we believe InCommon will be at a tipping point and will see broad adoption by smaller public and private schools based on the compelling cost savings to of outsourcing various software services. InCommon Steering feels confident it can hit the revenue targets for InCommon Basic. Discussions with the CIC, RUCC, and amongst the InCommon Steering members highlighted the fact that institutions would all agree to pay more if raising fees was essential to InCommon’s success. In addition, we believe that we have the opportunity as InCommon grows to increase the revenue it receives from commercial service providers as InCommon becomes more fundamental to their success.

In forming the business plan, we have been conservative in estimating growth and income from the new services (numbers 2-4 above). That said, even planning for the most conservative growth scenarios in these services we estimate that these three services will be bringing in approximately \$500,000 in 2011 and at least \$1,000,000 in 2012 and thereafter.

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Our projections show that under these conservative projections InCommon can have a positive cash flow in 2012 of approximately \$1,000,000 and pay back the investment loan plus interest. We would propose to do this over two years, paying half the loan balance in 2012 and the remainder in 2013. The key to this plan is getting access to investment capital that enables InCommon to build out the new services in 2010. Each of these will become cornerstones for future revenue growth in 2011 and beyond.

The table below highlights the major elements of the plan.

Year	# of Members	Goals	Draw Down
2009	165	<ul style="list-style-type: none"> <li>* Build membership</li> <li>* Develop pilot for Silver/Bronze with NIH and NSF</li> <li>* Launch search to hire exec director</li> <li>* Develop business and management plan</li> </ul>	None. In fact, InCommon will come in 20K in black.
2010	265	<ul style="list-style-type: none"> <li>* Build membership to 265</li> <li>* Create interim tiers and increase fees</li> <li>* Launch Silver/Bronze in production</li> <li>* Develop server certificate service. Launch fall 2010.</li> <li>* Pilot digitally signed email working group.</li> <li>* Provide Identity management training/consulting for campuses</li> <li>* Develop support model for running other federations as a service. Pilot one federation.</li> </ul>	<p><b>\$975,000</b> with conservative uptake</p> <p><b>\$573,000</b> with more aggressive uptake</p> <ul style="list-style-type: none"> <li>* InCommon will add staff to support running the federation and developing new services.</li> <li>* Total Revenue will grow by \$440,000 over 2009.</li> <li>* \$250K Revenue from increased fee schedule and tiers</li> </ul>

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Year	# of Members	Goals	Draw Down
2011	390	<ul style="list-style-type: none"> <li>* Build basic membership to 390</li> <li>* Implement community-approved tiering and fee structure</li> <li>* Have at least 30 schools running silver in 2011 with 70 schools in development.</li> <li>* Aggressively deploy new certificate service to members and grow revenue. Target is 110 participants in 2011 with rest of members in pipeline.</li> <li>* Begin marketing federation management services. Expand to add at least one additional managed federation services.</li> </ul>	<p><b>\$150,000</b></p> <ul style="list-style-type: none"> <li>* Increased member dues and members doubles basic revenue to \$1Million.</li> <li>* \$617K Revenue from increased fee schedule and tiers.</li> </ul>
2012	740	<ul style="list-style-type: none"> <li>* Build the “basic” membership to 740</li> <li>* Bring 70 new members into Silver/Bronze bringing total to 100. Have 100 campuses moving towards implementation in 2013</li> <li>* Aggressively grow certificate service to over 500 members.</li> <li>* Continue to expand federation management services by adding at least one more managed service.</li> </ul>	<ul style="list-style-type: none"> <li>* Put 500K to reserves</li> <li>* Pay back 600K of loan.</li> <li>* Total revenue from all services would exceed \$3 million.</li> </ul>
2013	740+	<ul style="list-style-type: none"> <li>* Build the “basic” membership to 740</li> <li>* Bring 100 new members into Silver/Bronze bringing total to 200.</li> <li>* Aggressively grow certificate service to over 600 members.</li> <li>* Expand federation management services by adding at least three more managed services.</li> </ul>	<ul style="list-style-type: none"> <li>* Build reserves to \$1 million. 500K to reserves</li> <li>* Pay back remainder of loan (~ \$600K).</li> <li>* Total revenue from all services would exceed \$3.8 million.</li> </ul>

### Appendix 1. Job Description for InCommon Executive Director

InCommon seeks an experienced, creative, mature, visionary leader to fill the position of Executive Director (ED). InCommon is a non-profit organization that operates identity trust services (such as the InCommon Federation) for US higher education and its commercial, educational, research and government partners; and supports an associated research and development program (the InCommon

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Foundation) that produces community-source software, standards, analysis, and training on identity and access management for the higher education community.

The InCommon Executive Director will lead, cultivate and facilitate growth of the InCommon Foundation and trust services, providing leadership to best meet the needs of the entire community of participants and adopters, and growing the participation in, and effectiveness of the community. He or she will evaluate and develop new lines of business, and manage production services. As the primary liaison of InCommon within higher education, and amongst service and government organizations, he or she will develop policy, promote community cohesion, and continually communicate across levels, constituencies and stakeholders to educate about identity management. The Executive Director will have a leadership position within Internet2, the parent organization of InCommon, and will report directly to the Internet2 CEO. He or she will manage the staff and operations of InCommon, allocating resources and assuring performance against financial and technical deliverables. He or she will work closely with the InCommon Steering Committee and its advisory committees in guiding policy and technical directions for InCommon.

This position requires extensive experience in leading organizations and cultivating communities, excellent communication skills, knowledge of identity management policy and practices, and familiarity with the higher education environment.

### **Appendix 2. Sample of Community Financial Commitment to InCommon**

Major Corporate Partner:

"We can confirm that we have made [federated access] a strategic priority, and have invested significant development effort over the past several years in this area. We are currently working with 14 federations around the world to ensure the broadest level of support for our customers, and view this as a win/win for customers, their end users and service providers such as ourselves."

Major Research University:

1. \$1.7M invested in Identity Management and federation for '09-'10  
2. Yes, we're more than happy to endorse a fee increase to 4K  
"... we conservatively estimate that we save \$85K per federated application (does not include power and cooling savings). With 10 federated applications, that's \$850K annually. These are just the central IT cost savings and do not include what we know to be reduced support costs, which are impossible to capture. In our first production app, an 80% reduction in help desk calls was measured between semesters due to password resets."

### **Appendix 3. InCommon Future Group Members**

- Amy Philipson, Pacific NW Gigapop, (Internet2 AMSAC)
- Chris Shillum, Elsevier, (InC Steering)
- Clair Goldsmith, UT System, (InC Steering)
- Cliff Lynch, CNI, (Internet2 RAC)
- Doug Van Houweling, Internet2
- Jack Suess, UMBC, (InC Steering)
- John Krienke, Internet2 (InCommon Operations)
- Ken Klingenstein, Internet2, U Colorado, (InC Steering)
- Kevin Morooney, Penn State, (InC Steering)
- Lois Brooks, Stanford, (InC Steering)
- Richard Katz, EDUCAUSE
- Rosio Alvarez, Lawrence Berkeley Labs, (Internet2 RAC)
- Ray Ford, U Montana, (Internet2 AMSAC)
- RL 'Bob' Morgan, U Washington, (InC TAC -- technical advisory committee)

**Appendix 3. Financials: Executive Summary**

**Executive Summary INCOMMON -DRAFT-**

Income Source	2008	2009 est.	2010 proj.	2011 proj.	2012 proj.
Internet2	1,472,238	1,426,463	1,871,377	1,927,518	1,985,343
Grants	393,196	315,500	203,422	-	-
InCommon Federation 'basic'	147,300	220,000	516,000	1,032,500	2,018,750
Other: New Service Fees	-	-	-	-	-
Bronze & Silver Levels	-	-	-	72,500	310,000
Certificate Services	-	-	90,000	220,000	477,500
Shib Training & IdM Consulting	-	-	20,475	20,475	20,475
Operating Other Federations	-	-	100,000	200,000	300,000
eduroam (Federated Wireless)	-	-	-	-	-
<b>Total Income</b>	<b>2,012,734</b>	<b>1,961,963</b>	<b>2,801,274</b>	<b>3,472,993</b>	<b>5,112,068</b>
<b>Expenses</b>					
Leadership, Advocacy, and Outreach	1,142,457	1,107,226	1,542,563	1,588,839	1,636,505
Foundation: Software Development & R	722,977	634,737	649,306	369,498	380,583
InCommon Federation 'basic'	116,863	200,000	423,250	546,355	562,686
Other New Services	-	-	-	-	-
Bronze & Silver Levels	-	-	273,500	227,495	284,185
Certificate Services	-	-	187,750	190,673	196,258
Shib Training & IdM Consulting	-	-	\$212,430	\$218,743	\$225,245
Operating Other Federations	-	-	\$85,500	\$180,061	\$242,294
eduroam (Federated Wireless)	-	-	-	-	-
<b>Total Expense</b>	<b>1,982,297</b>	<b>1,941,963</b>	<b>3,374,299</b>	<b>3,321,664</b>	<b>3,527,755</b>
<b>Net Reserve</b>	<b>30,437</b>	<b>20,000</b>	<b>(573,025)</b>	<b>151,329</b>	<b>1,584,314</b>

3% Year over Year Assumption  
Grant Funded Projects TBD for 2011.

Not Yet Modeled

3% Year over Year Assumption  
3% Year over Year Assumption

Not Yet Modeled

**Deliverables for new investments:**

	2011	2012
Silver in production	Signed email clients.	Deployed, ubiquitous signed infrastructure
Spread into CLAC, community colleges, etc	Two-Factor IdM WG	Recommendations on National two-factor service
Non-failure of federated identity	Gold-Level WG	Gold Pilot, Gold Service
Improving campus IdM (going for Silver)		
Set up new lines of services		
Signed mail WG		
Increased use of foundation by applications		

**A Few Key Variables**

- Participation growth rates
- Pricing models for services
  - Tiers by institutional class, packaging for consortia and state systems, Internet2 members, corporate fees
  - Modest 2010 rate increases
  - 2011+ rates set by transparent community processes
- Continued strong partnership with US Gov
- State of the economy
- Grants
- Interfederated mechanisms

TOTAL STAFF	2009	2010	2011	2012
Business Officer	0	0.9	0.90	0.90
Policy Developer	0	0.4	0.40	0.40
Program Manager	0	0.4	0.40	0.40
Operations Manager	0.5	0.9	1.00	1.00
System Developer(s)	0.4	1.4	1.50	1.60
Shib Admin	0	0.5	0.50	0.50
Sys Admin	0	0.2	0.20	0.20
Train the Trainer	0	0.2	0.20	0.20
Editor/Producer/Webmaster	0.5	0.2	0.20	0.20
Customer Technical Support	0	0	0.40	0.60
Registration Authority	0.3	0.5	1.00	1.00
Executive Director	0	1.00	1.00	1.00
Existing Staff (See MW Funding Summary Tab)	7.1	7.10	7.10	7.10
Wash D.C. Policy Advocacy	0	0.25	0.25	0.25
	<b>8.8</b>	<b>14.0</b>	<b>15.1</b>	<b>15.4</b>

