# NSTIC: CommIT Abbreviated Proposal – DRAFT – V6

The Common Identity and Trust (CommIT) CommIT formed a year ago between Internet2/InCommon and the Postsecondary Electronics Standards Council (PESC), includes a diverse array of voluntary stakeholders who are working to develop a new service infrastructure for higher education. Aligned with NSTIC, this project includes a technology, business, and policy solution to ease the burden of high school students and adult learners transitioning or re-entering into higher education and the organizations that service them. This proposal outlines how federated identity, strong credentials, and new privacy-enhanced access management infrastructure can revolutionize the Higher Education admissions process.

While this project is making progress through volunteer work and very modest participant contributions, funding from this FFO would significantly accelerate the infrastructure, business model, and governance work necessary for marketability and sustainability.

## Overview

Federated Authentication has had significant pockets of adoption in both the Higher Education and Research sectors globally, including deployments with U.S. Federal and corporate service partners. For instance, over 5.7 million individuals, mostly students, have access to InCommon-federated services. However, large-scale linkages are needed at broader and earlier points of entry for individuals. In particular, the 2.5 million students annually that enter into this identity space need fewer credentials, higher strength for the credentials they do have and easier application process that provides user-control of their transactional attributes across a wide gambit of service providers.

From a Relying Partner or Service Provider perspective, new interesting services will span organizations and stakeholders in a context of trust. Without this, colleges and businesses rely on their own isolated practices and communicate things manually with paper-based or one-off methods. Enabling this trusted service infrastructure to allow for not only run-time user consent, but extended user-defined trust relationships can reduce the costs related to how information is shared, validated and used to place a student in a program.

The goal of this proposal is to support a small pilot for traditional and non-traditional students applying to college. CommIT would leverage federated identity and develop a related infrastructure to provide a rational and privacy-preserving way of managing access across the diverse organizations involved in the admissions process. In addition, CommIT will establish a governance process to tackle the common business model, policy, and decision-making, and conflict resolution process involved with a multi-partner relationship.

Collectively, this benefits the students by offering more service choice and convenience and the service providers by reducing cost and enabling a pluggable policy, data, and privacy framework to support new interesting services.

## Proposed Approach

InCommon and PESC are partnering on the Common Identity and Trust (CommIT) , an informal group of colleges and universities and non- and for-profit organizations that offer student services to Higher Education. CommIT is working on a proof of concept to address these challenges, scoped to K12 students applying to college. Our proposal includes the following components:

1. Pilot two approaches to enable K12 students to apply to college using federated credentials. The first approach would entail working with one or more K12 districts to bring up an identity provider and identify students to use it during the pilot. The experiences gleaned from this work would be shared with the K12 community through partners such as CosN to encourage wide-scale deployment. However, few K12 districts are federated, so InCommon would also deploy an admissions-community FICAM LoA 2/Silver identity provider. Prospective students without federated credentials could acquire one for use during the admissions cycle. Both approaches would encourage students to transition to an HE institutional credential linked to their CommIT credential once matriculated and adhere to the FICAM Privacy Requirements.

2. Develop mechanism to elevate credential strength to FICAM LoA 2 to enable new services and reduced risk. Testing agencies such as College Board and ACT identity proof students before taking the SAT or ACT tests. The project will leverage these and other processes and events where students are currently expected to prove their identities to escalate and transition student’s credentials to LoA 2. Individuals using the K12 IdP would also have the ability of receiving LoA 2 credentials. Adult learners without LoA 2 credentials could be identity proofed at a local participating institution. Users coming to universities with proofed credentials enable opportunities for universities and corporate partners to engage these students in a richer service mix than is presently the case.

3. Develop an easy-to-use privacy-preserving architecture that allows for flexibility in service requirements and implementation. This includes the creation of user controlled limited lifetime pipelines between participants for transfer of user data. While this is similar to “provisioned privacy,” CommIT would also deploy mechanism for run-time approach for user consent to provide deployment options.

4. Create a governance structure for the CommIT project and ongoing Collaborative to enable the development of shared policy, business, and operating structures. Develop strong privacy and operating policies with consequences for all participating organizations. Applicants will use the trusted identity provided by the CommIT Collaborative to direct a transfer of their data to selected institutions or corporate service providers. The CommIT Collaborative will implement privacy-enhancing technologies and will be compliant with the disclosure provisions of the Family Education Rights and Privacy Act, FICAM privacy requirements, as well as other appropriate privacy legislation.

5. Develop a flexible business model for sustainability of authentication and access management, policy, and business infrastructures. Since participants will be enjoying reduced costs, students may be able to use CommIT privacy, linking and account services for free.

6. Include a diverse array of partners to increase value of the credential and market for higher-LoA credentials including K12, state network providers, for-profit and non-profit entitles and higher education. Current partners in CommIT that may participate in the pilot include:

* Corporate and not-for-profit service providers including National Student Clearinghouse/Meteor which represents non-governmental student loans, Common App, AcademyOne, College Board, ACT.
* University partners including North Carolina State University, University of Wisconsin-Madison, The Pennsylvania State University.

In addition, CommIT will ask one or more State R&E Network Providers such as MCNC or NJEdge, respectively North Carolina’s and New Jersey’s R&E network, which will connect with and support K12.

## Project Timeline

In the first year, CommIT would focus on 1) building the governance structure, identify CommIT policies, and develop business model, 2) designing and prototyping data architecture, identity provider and minimal identity management system and related password management processes, 3) develop identity proofing processes and connections into the CommIT IdM System, 4) assist participating organizations to integrate the CommIT infrastructure, and 5) work with a federated K12 district and bring their processes/infrastructure up to LoA 2. 6) Identify K12 and adult-learner pilot groups.

In the second year, the CommIT will pilot with test data starting in the fall of 2013 and move to limited production in the late spring of 2014.

## Budget Justification

Each of the CommIT leads (see below) would receive support to fulfill their roles. The Silver/LoA2 Identity Provider, related minimal identity management system (for password reset), privacy-preserving data architecture, participant tool development would require significant funding. One or more testing services would receive funding to support integrating their identity proofing processes into the CommIT IdP. One or more State R&E Network Providers would receive funding for liaising with and supporting the K12 pilot. Several higher education institutions and corporate service partners would be contractors to partially offset their work to participate in the pilot.

## Collaborators to Ensure Success

**InCommon,** operated by Internet2, is a FICAM-approved trust framework provider that supports trust infrastructures for the Research and Education Community. InCommon/Internet2 would act as the cooperative agreement lead, co-project lead, and technical lead.

**PESC** is a non-profit, community-based, umbrella association of diverse organizations the enables cost-effective connectivity between data systems to accelerate performance and service, to simplify data access and research, and to improve data quality along the higher education lifecycle. PESC would be the governance and business development lead.

**Georgetown University** is one of the world’s leading academic and research institutions**.** Georgetownwould be the privacy policy and co-project lead.

## Anticipated Outcomes

The Higher Education application process requires user data to span organizations and stakeholders. Without trust, all must rely on their own isolated practices and duplicate authentication and access practices. CommIT can reduce the costs related to how information is shared, validated and used to place a student in an academic program. The work outlined in this proposal will benefit many partners in a process that is currently redundant, risky, costly, and inconvenient:

* Universities and Corporate Partners save money, eliminate managing the credentialing process for prospective students and reduce their risk due to the increased level of assurance.
* Students manage fewer credentials and enjoy increased convenience in applying to college. Individuals will provide consent for service interaction and control the flow of their information from one partner to another, managing their privacy. Moreover, they can benefit from innovative services enabled by stronger credentials and robust common service infrastructure.

Rooted in our Collaborative is the desire to reduce the hidden costs embedded across decentralized higher education processes. As our world continues to grow more complex, rising tuition across public and private institutions everywhere are related to the lack of reliance on shared services and technology. We believe isolated and often redundant services such as authentication and identity proofing can be shared to lower costs across thousands of institutions while improving consumer services. We believe CommIT offers a unique opportunity to connect K-12, higher education and industry that will afford greater productivity, improved outcomes and lower cost - which will in the end, improve our global competitiveness.