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Comptroller of the Currency  
Administrator of National Banks

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Washington, DC 20219

**Conditional Approval #339**  
**December 1999**

November 16, 1999

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Re: Operating Subsidiary Applications by Bank of America, N.A., and Citibank, N.A. to  
expand the activities of Identrus, LLC  
Application Control Numbers: 1999-WO-08-0009 and -0010

Dear Messrs. Huffstutler and Walker:

Bank of America, National Association, Charlotte, North Carolina ("Bank of America") and Citibank National Association, New York, New York ("Citibank") (collectively, the "Applicant Banks") have applied to the Office of the Comptroller of the Currency ("OCC") to expand the activities of Identrus, LLC, a Delaware limited liability company (the "LLC") and, thereby, along with the LLC's other founding organizations,<sup>1</sup> establish and operate a system to create and issue digital certificates.

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<sup>1</sup> The financial organizations founding the LLC, in addition to Bank of America and Citibank, include ABN AMRO N.V., Bankers Trust Company, Barclays Bank PLC, Bayerische Hypo-und Vereinsbank AG, The Chase Manhattan Bank, Deutsche Bank AG, National Westminster Bank PLC, Canadian Imperial Bank of Commerce, and Sanwa Bank (collectively, the "Founding Members")

The Founding Members have established the LLC<sup>2</sup> and will form a global, interoperable network of participating financial organizations that will operate as certification authorities (the "LLC System"). The Founding Members expect that these participating financial organizations (each, a "Participant") will include the Founding Members and other future equity owners of the LLC, as well as other financial organizations that are not equity owners of the LLC.

As discussed in detail below, each Participant will issue digital certificates to commercial customers and their employees based on a set of uniform system rules, minimum operating standards and common business practices.<sup>3</sup> The LLC will perform two functions in the digital certificate system. First, the LLC will serve as the "root" certificate authority of the LLC system. Second, the LLC will provide a system infrastructure within which the Participants will provide certificate authority services to their customers. This infrastructure will include establishing technological and procedural systems to support the proposed activities, developing and maintaining rules and practices governing participation in the system, providing ongoing monitoring and data processing functions to monitor and control risks to the Participants and their customers, and establishing a dispute resolution mechanism for issues arising out of the use of the system. For the reasons below, the OCC finds these activities of the LLC to be part of or incidental to the business of banking and, accordingly, conditionally approves the application.

A. *The Proposed Activities*

1. *Digital Certificates and Digital Signatures*

In this case, a certification authority ("CA") is a trusted third party that confirms the identities of parties sending and receiving electronic communications using a digital signature<sup>4</sup> in an electronic authentication

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<sup>2</sup> Bank of America owns 12.3457% of the LLC through an existing wholly-owned operating subsidiary, BA Interactive Services Holdings, Inc. Citibank owns 12.2457% through an existing wholly-owned operating subsidiary, Citibank Strategic Technology, Inc. The banks' acquisition of their ownership interests in the LLC was approved by the OCC in a letter dated January 15, 1999 (The "January 15th letter"), OCC Conditional Approval No. 301.

<sup>3</sup> The January 15<sup>th</sup> letter approved an investment in an LLC engaged in research and development activities that anticipated establishment of an identity certification service. Now the LLC would like to operate a system to support such a service. The core issue in this application is whether the applicant banks may continue, through operating subsidiaries, their investments in the LLC despite its expanded activities. Thus, in deciding this application, OCC need not and does not express any opinion on the direct activities of the Participant Banks in the LLC system. The OCC will address the particular activities of participating national banks through its normal supervisory processes as it has done in other similar technological joint ventures. See, e.g., Conditional Approval No. 221 (Dec. 4, 1996) and Interpretive Letter No. 737, *reprinted in* [1997-1997 Transfer Binder] Fed. Banking L. Rep. (CCH) ¶ 81-101 (August 19, 1996) at n. 3.

<sup>4</sup> Digital signatures are a form of electronic authentication. Specifically, a digital signature is a string of characters, generated using public key cryptography, appended to an electronic message that serves to uniquely identify the sender to the recipient and, thereby, provides electronic authentication. In order for a digital signature system to operate successfully, message recipients must have assurance that the public key used to decode a message is

system based on public key encryption infrastructure (“PKI”). In a PKI system, the fundamental function of a certification authority is to verify the association between a particular person and a particular public/private key pair. The certification authority issues a digital certificate to the subscribing party (“Subscriber”) that verifies the subscriber’s identity and its corresponding public/private key pair. The recipient of an electronic message who depends on digital certificates for authentication is called a “relying party.” The CA will also maintain a database of its active certificates called a “repository.”

To establish the authenticity of its certificates, a CA attaches its own digital signature to each certificate it issues. In turn, a CA may seek to authenticate its own identity by arrangement with another CA in which that CA verifies the identity and public/private key pairs of the first CA. Thus, one can structure a digital certificate system with tiers of certificate authorities in a pyramid with the top or apex CA authenticating a tier of CAs which in turn verify the identities of another successive tier of CAs. In such a system, the authenticity of certificates issued in the lowest tier of CA’s can be traced back, through the pyramid of CA’s, to the root CA. The top or apex CA, which acts as the final CA in the process, is called the “root certification authority.”

## 2. *The Proposed Activities of the LLC and the LLC System*

As noted above, the LLC will enable the Participants to provide certification authority services to their commercial customers. The LLC will not offer services directly to any customers or members of the public; rather a customer may obtain certification authority services only from a Participant.<sup>5</sup>

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uniquely associated with the purported sender of the message.

One method of providing that assurance is for a trusted third party to issue a digital certificate attesting to this association. A digital certificate is an electronic document that formally associates a digital signature public key with the "owner" of the public/private key pair used to create and verify a digital signature. In other words, the certificate attests that the public key associated with a digital signature is "bound" to its owner and the certificate contains the public key or information directing the message recipient to the public key.

The message recipient can verify the validity of the digital certificate because the certificate also contains the digital signature of the trusted third party: the certificate authority. In addition, the digital certificate may contain other information such as its validity period, the type and number of messages for which the signature is authorized, as well as some indication of the issuer's liability related to use of the certificate. For additional information on digital signatures with public key cryptography, see Appendix A to OCC Bulletin 99-20.

<sup>5</sup> The LLC System will be a "closed" system restricted to Participants that have agreed to meet the minimum operating standards, to operate according to the common business practices, and to abide by the LLC System's rules and regulations (the “Operating Rules”). The LLC will issue certificates only to Participants. The Participants will issue identity certificates only to commercial customers that have signed agreements consistent with the Operating Rules and after the Participant has performed due diligence to ensure that appropriate customer identity verification has been obtained. The LLC will not have access to confidential information of the Participants’ customers.

*a. Root Certificate Authority*

The LLC will establish a tiered CA system. The LLC will serve as the root CA for the LLC System. Participants may join the system either directly, as "Level One Participants," or indirectly, as "Level Two Participants."<sup>6</sup> Level One Participants will receive a certificate directly from the LLC and may issue certificates either directly to customers or to Level Two Participants. Level Two Participants may only issue certificates directly to customers. The LLC will also perform a repository function, maintaining a database of the Level One Participants' certificates and their status, to permit the LLC to confirm the validity of a Participant's certificate at the request of another Participant.

*b. Operating Rules*

The LLC System will also enable Participants to manage the risks involved in acting as certification authorities by providing and establishing risk management systems and the operational procedures and standards contained in the Operating Rules.<sup>7</sup> These risk management systems and standards are crucial because the LLC system will permit the LLC Participants to provide relying parties with explicit warranties as to the validity of the Participant's digital certificates.

*c. Validations and Warranties*

Specifically, the LLC system will enable a relying party to obtain validation of a digital signature on a real-time basis through an on-line certificate status check. This will be done by a validation check against the issuing Participant's active certificate repository, requiring the issuing Participant to confirm that it did in fact issue the certificate and that the certificate is current and not revoked.

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<sup>6</sup> The criteria for participation in the LLC System will be different for Level One Participants and Level Two Participants. In both cases, however, the Participant (or its parent) must be engaged primarily in the business of financial services, be subject to substantive regulation by a government authority in its home country, and be subject to periodic examination, periodic reporting requirements, and capital regulations administered by that government authority. There are additional requirements designed to protect the LLC and its Participants from the legal, operational, credit and reputational risks that may arise from the failure of a Participant to meet its obligations with respect to a warranty or otherwise, to ensure that the Participant is technologically competent to carry out its obligations within the LLC System, and to ensure that the LLC System complies with all applicable laws, without discriminating on an inappropriate basis.

<sup>7</sup> The Founding Members are continuing to develop these Operating Rules, which will be finalized before the system becomes operational. The OCC will review these rules. In addition, Applicant Banks represent that they will use their best efforts to assure that the activities of the LLC will abide by OCC's current and future guidance regarding the conduct of certificate authority by national banks. The LLC will have the authority to enforce these rules against system participants. This includes the authority to terminate participants for reasons relating to preserving system integrity.

When a relying party receives a validation check from the issuing Participant, the Operating Rules enable the relying party to seek and obtain a warranty from the issuing Participant.<sup>8</sup> Where the relying party seeks validation or a warranty from a certification authority other than its own (for example, where a customer of Bank A receives a certificate from a customer of Bank B), the relying party requests validation or warranty through its own CA (i.e., Bank A would request a validation or warranty from Bank B on behalf of and as agent of its customer). The LLC system transmits all the necessary messages between the CAs to permit validation checks. Despite the role of the LLC, the issuing Participant (Bank B) is always the primary obligor on the warranty, while the relying Participant (Bank A) merely acts as an agent of its customer in requesting the warranty. The LLC will not issue warranties. The banks engaged in these cross-CA validation or warranty requests would validate their own inter-bank communications by reference to the LLC's repository of Participant certificates.

In order to manage the risks of the CA system, the LLC implements and monitors the aggregate dollar value of warranties outstanding for each Participant. Moreover, the system is implemented such that the LLC and Level One Participants may monitor each Participants' compliance with their established limit on a real-time basis. The LLC will have the authority to impose sanctions on issuing Participants for any violation of the warranty cap rules.

*d. Warranty Claims and Participant Collateral*

Additionally, to ensure liquidity or payment of potential warranty assurance claims, the LLC system may require collateral from Participants issuing warranties. In the event of any Level One Participant failure, the LLC could use the pledged collateral to settle any unresolved claims. As established under system rules, each Participant posts collateral, with the amount determined by an internal risk weighting methodology. The LLC will not itself hold the collateral, which will instead be held by a financial institution as collateral trustee for the Participants' customers. However, the LLC will act as the customers' agent in instructing the collateral trustee to liquidate collateral and apply it to a Participants' unsatisfied obligations under a warranty claim. The LLC will monitor the posting of collateral by Participants and liquidate that collateral when provided under the Operating Rules.

The LLC System also provides specific Operating Rules for handling claims and disputes on warranties issued. The subscriber's CA Participant (if different from the issuing Participant) presents the claims of its customer to the issuing Participant as agent of that customer. A subscriber's CA may in its discretion provide provisional credit for the claim, in which case it is subrogated to the claim of its

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<sup>8</sup> A "warranty" in this case is an assurance, with a specified expiration date, from the issuing Participant to the relying party that the contents of the certificate were accurate at issuance and continue to be accurate at the time of use, i.e., that the subscribing party was not misidentified. The financial amount of the warranty (i.e., the amount paid to the relying party in the event of breach) is agreed between the parties. Under the Operating Rules and agreements, only one warranty may be outstanding for any given transaction, and a Participant is not liable to a relying party unless the Participant has issued a warranty.

customer. If the issuing Participant determines not to pay the claim, the claim is adjudicated by the LLC under the LLC System's dispute resolution procedure and the LLC may, in appropriate cases, direct the collateral trustee to pay the claim using collateral held on behalf of the issuing Participant.

*e. System Data Processing Activities*

The LLC also will engage in data processing activities relating to the certification authority and repository functions. The data processing activities to be conducted by the LLC will include generating the digital certificates for the Level One Participants; managing and storing data about the status of those certificates; communicating with Participants; monitoring and communicating information about the aggregate outstanding explicit warranties issued by the Level One Participants as compared to the maximum caps established by the LLC for Participants; receiving, managing and storing data about collateral posted by the Level One Participants and comparing that data to the collateral requirements established by the LLC for those Participants; and other similar activities. The LLC also acts as a switch, providing the necessary message transmission between participants, as well as managing process for validating the signature for a party. These activities will be conducted solely for the purpose of providing the services described above, and not as a separate product or service to customers.

*f. Policy Authority and System Rules*

The LLC will act as a "policy authority" for the LLC System, establishing guidelines, procedures, and Operating Rules for participation in the system. Included in this function will be the establishment of auditing requirements and other standards designed to further the safety and soundness of the system's operations, as well as the development of policies and strategies relating to the way in which LLC System-related products, rights and obligations are presented to customers (i.e., "branding" and marketing matters).

Although operating within a closed system and an established set of Operating Rules, Participants will have extensive discretion on the scope and nature of their CA activities. For example, the LLC will be a multi-vendor system and will allow Participants to customize the management of their identity risk when dealing with individuals over an electronic media.<sup>9</sup> Moreover, each participating financial organization will develop its own set of targeted companies and electronic commerce applications using digital certificates. Each will have the right to independently determine products, bundles, and services offered, and fees charged to subscribing and relying parties.

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<sup>9</sup> However, Participants in the LLC system will use only hardware-based certificates. End-users will have smart-card based certificates.

Given the range of autonomy and discretion of the Participants, one critical function of the LLC will be to provide a platform for the various technologies used to interoperate. This will enable the commercial customers of the various participating financial organizations to recognize and validate the certificates of other commercial customers. The LLC will develop and provide to its Participants a limited range of software necessary to permit the Participants to function within the LLC System.<sup>10</sup> The LLC will not sell or distribute hardware to participants or end-users.

*g. System Structure and Ownership*

The LLC was established under the Delaware Limited Liability Company Act pursuant to a Limited Liability Company Agreement (the "LLC Agreement"), effective as of March 10, 1999. The LLC's initial offices will be located in New York, NY. The capitalization of the LLC is approximately \$15.97 million.

The equity interests in the LLC will be owned by the Founding Members, as well as up to twelve additional equity holders who will be required to make capital contributions to the LLC in exchange for an equity interest. Participants in the LLC System will not be required to hold equity in the LLC. Participation in the LLC System as a Participant will be open to all entities that satisfy the Participant criteria outlined above. The initial owners of the LLC's equity are the Founding Members referred to above.

All Participants, whether equity holders or not, will have the same rights and obligations as Participants and will enter into similar Participant agreements with the LLC to establish the terms of their operational relationship. However, all equity holders must be active participants in the LLC System, and the LLC Agreement will require that each equity holder operate a certification authority and provide risk management services within the LLC System.

The LLC will be subject to OCC supervision, regulation, and examination. Before the LLC and the Participants begin to provide services to the public through the LLC System, the LLC and the Participants will submit to all necessary regulatory authorities, including the OCC, a complete description of the LLC's information systems and back office operations architecture. This description will include a list of third-party software and vendor services that are proposed to be used; a description of major LLC operating processes; a description of the LLC's security controls; a description of the LLC's internal controls; and the LLC's internal audit plans. Moreover, the LLC will notify all potential vendors in writing of the regulatory authorities' examination and regulatory authority under applicable law, and all vendor contracts will stipulate that the performance of the services

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<sup>10</sup> The LLC intends to sell or distribute a software development kit that establishes technical specifications required to Participants and other developers to develop software compatible with the LLC system. The LLC does not initially intend to develop or sell software applications or systems.

provided by the vendors to the LLC is subject to these authorities' examination and regulatory authority.

*B. Analysis*

A national bank may engage in activities that are part of or incidental to the business of banking by means of operating subsidiary. 12 C.F.R. §5.34. In a variety of circumstances, the OCC has permitted national banks to own, either directly, or indirectly through an operating subsidiary, a minority interest in an enterprise.<sup>11</sup> The OCC has concluded that national banks are legally permitted to make a minority investment in a company provided four criteria or standards are met.<sup>12</sup> These standards, which have been distilled from our previous decisions in the area of permissible minority investments for national banks and their subsidiaries, are:

*(1) The activities of the enterprise in which the investment is made must be limited to activities that are part of or incidental to the business of banking.*

*(2) The bank must be able to prevent the enterprise from engaging in activities that do not meet the foregoing standard, or be able to withdraw its investment.*

*(3) The bank's loss exposure must be limited, as a legal and accounting matter, and the bank must not have open-ended liability for the obligations of the enterprise.*

*(4) The investment must be convenient or useful to the bank in carrying out its business and not a mere passive investment unrelated to that bank's banking business.*

We conclude, as discussed below, that the expanded activities of the LLC satisfies these four criteria.

*1. The activities of the enterprise in which the investment is made must be limited to activities that are part of or incidental to the business of banking*

*a. Root Certificate Authority*

As noted above, the LLC will serve as the root CA and repository for the LLC System. This activity is permissible for national banks. The OCC has found that certificate authority activity is “part of the

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<sup>11</sup> See, e.g., OCC Conditional Approval Letter No. 219 (July 15, 1996).

<sup>12</sup> See Interpretive Letter No. 692, *reprinted in* [1995-1996 Transfer Binder] Fed. Banking L. Rep. (CCH) ¶ 81,007 (November 1, 1995), and OCC Interpretive Letter No. 694, *reprinted in* [1995-1996 Transfer Binder] Fed. Banking L. Rep. (CCH) ¶ 81,009 (December 13, 1995).



business of banking” because the activity is: “1) the functional equivalent of notary and other authentication services already provided by banks, and 2) a logical outgrowth of the identification and verification skills that are a core competency of banks.” Conditional Approval No. 267 (January 12, 1998) (Application to establish an operating subsidiary that will act as a certification authority and repository for digital certificates used to verify digital signatures). *See also*, Conditional Approval No. 301 (January 15, 1999). Further, OCC has concluded that the repository function for digital certificates issued by a certification authority is part of the certification authority activity and thus is permissible as part of that activity. Conditional Approval No. 267, *supra* at p. 9 n. 22

*b. System Infrastructure*

The LLC’s proposed system infrastructure activities described above are also permissible for national banks. OCC has long held that national banks may invest in joint ventures that provide essential infrastructure for multiple bank financial services systems. These systems have included ATM/EFT networks<sup>13</sup>; stored value systems<sup>14</sup>; multi-bank merchant credit card processing systems;<sup>15</sup> and multi-bank clearinghouse operations.<sup>16</sup>

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<sup>13</sup> Interpretive Letter No. 854, *reprinted in* [1998-1999 Transfer Binder] Fed. Banking L. Rep. (CCH) ¶ 81-311 (February 25, 1999)(EFT network); Conditional Approval No. 221, *supra* (Network to provide home banking an electronic financial services); Interpretive letter No. 732, *reprinted in* [1995-1996 Transfer Binder] Fed. Banking L. Rep. (CCH) ¶ 81-049 (May 10, 1996) (EFT and EDI network); Interpretive Letter No. 705, *reprinted in* [1995-1996 Transfer Binder] Fed. Banking L. Rep. (CCH) ¶ 81-020 (October 25, 1995)(ATM and POS switch network); Unpublished Letter from Robert Serino (September 9, 1992)(EFT system); Interpretive Letter No. 419, *reprinted in* [1987-1988 Transfer Binder] Fed. Banking L. Rep. (CCH) ¶ 85,643 (February 16, 1988)(Joint venture to facilitate settlement and payment of health insurance claims through use of shared EFT system); Interpretive Letter No. 382, *reprinted in* [1988-1989 Transfer Binder] Fed Banking L. Rep. (CCH) ¶ 85,606 (May 5, 1987) (Switch network); Interpretive Letter No. 289, *reprinted in* [1982-1984 Transfer Binder] Fed. Banking L. Rep. (CCH) ¶ 85,453 (May 15, 1984)(ATM Network); and Interpretive Letter No.160, *reprinted in* [1979-1982 Transfer Binder] Fed. Banking L. Rep. (CCH) ¶ 85,241 (August 18, 1980)(ATM Switch).

<sup>14</sup> Conditional Approval No. 220, *supra* (Investment in two LLCs that provide the infrastructure for a stored value system by, among other things, managing system collateral assets, performing a system risk management functions that included elements to help the participating banks monitor and control their own risk exposures, handle system marketing functions, perform record keeping, data analysis and other support services for the system.)

<sup>15</sup> Interpretive Letter No. 720, *reprinted in* [1995-1996 Transfer Binder] Fed. Banking L. Rep. (CCH) ¶ 81-035 (January 26, 1996)(Investment in system that provides the infrastructure to allow participants to verify credit card accounts a real-time basis, and settle claims among customers of participating banks, system auditing functions, system security services, and marketing functions). *See also*, Unpublished letter from Acting Comptroller William B. Camp (November 18, 1966) and Unpublished letter from Comptroller James J. Saxon (October 12, 1966).

<sup>16</sup> Unpublished letter from Peter Liebesman dated January 26, 1981. *Cf.*, Unpublished letter from James J. Saxon dated January 28, 1964; Unpublished letter from Robert B. Serino dated July 26, 1989; and OCC Interpretive Letter No. 692, *supra*. Case authority also holds that this is a permissible activity for national banks. Philler v. Patterson, 168 Pa. 468, 32 A. 26 (1895); Crane v. The Fourth National Bank, 173 Pa. 556, 34 A. 296 (1896). *Cf.*, Andrew v. Farmers & Merchants Savings Bank, 245 N.W. 226, 229 (Iowa 1932).

These infrastructure joint ventures have performed the same types of supportive functions proposed for the LLC. They have provided system wide operational procedures and standards, and common trademarks and marketing devices.<sup>17</sup> They have performed risk management functions for the system including facilitating interbank communication on warranty requests claims, imposing and monitoring aggregate limits on the obligations of participating entities, overseeing the posting and liquidation of collateral, adjudicate customer claims, enforcing system operational rules, standards, and requirements.<sup>18</sup>

Probably the central activity of the LLC is data processing relating to the certification authority and repository functions. This is part of the business of banking. An earlier version of 12 C.F.R. § 7.1019 states that “as part of its banking business and incidental thereto, a national bank may collect, transcribe, process, analyze, and store for itself and others, banking, financial, or related economic data.” Interpretive Ruling 7.3500, 39 Fed. Reg. 14195 (Apr. 22, 1974). Although in its 1984 revision of the ruling the OCC deleted this statement because it believed that “specific examples [of permissible electronic activities] are inappropriate given the imprecision of terms and rapid pace of change in the data processing industry”, 49 Fed. Reg. 11157 (Mar. 26, 1984), the “analytical framework” embodied in the ruling remained the same. *Id.* There was no intent to narrow or restrict the substantive effect of the rule. OCC Interpretive Letter No. 677, *reprinted in* [1994-1995 Transfer Binder] Fed. Banking L. Rep. (CCH) & 83,625 (June 28, 1995). See also, OCC Interpretive Letter No. 653, *reprinted in* [1994-1995 Transfer Binder] Fed. Banking L. Rep. (CCH) ¶ 83,601 (Dec. 22, 1994) (national bank may maintain records when acting as an informational and payments interface between insurance underwriters and general insurance agents); OCC Letter No. 346, *reprinted in* [1985-1987 Transfer Binder] Fed. Banking Law. Rep. (CCH) ¶ 85,516 (July 31, 1985) (national banks may maintain records on commodities transactions).

As the business of banking expands in response to technological advances and other developments, the related concept of “banking, financial, or related economic data” likewise expands. *See, e.g.*, Conditional Approval 221, *supra* (processing data related to multi-bank home banking and network); Interpretive Letter No. 737, *supra* (processing of data related to stored value transactions is processing of “banking, financial, or related economic data.”). Here, certification authority activity is the business

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<sup>17</sup> Interpretive Letter No. 854, *supra* (EFT network providing marketing materials to participants); Interpretive letter No. 705, *supra* (ATM switch held system marks and marketing agreements).

<sup>18</sup> Interpretive Letter No. 737, *supra* (investment in an LLC that would provide auditing and recordkeeping functions for a multiparty stored value system); Interpretive letter No. 705, *supra* (ATM switch transmits authorization or denial of authorization information for transaction among participating depository institutions, processing transactions and settling on a net basis, providing net settlement information to the participating banks and affecting settlement by pivoting and crediting accounts held at correspondent institutions); and Interpretive Letter No. 419, *reprinted in* [1988-1989 Transfer Binder] Fed. Banking L. Rep. (CCH) ¶ 85,643 (February 16, 1988)(Joint venture operates system resources to permit inter participant communications dealing with the transmittal and settlement of claims).

of banking. Thus, data related to CA functions and activities are “banking” data that a national bank may process, analyze, and store for itself and others.

Finally, the LLC will provide limited purpose software to Participants. In analyzing the extent to which national banks may provide hardware and software, the OCC has distinguished between limited purpose and general purpose items:

When the hardware is such that it is not to be used for uses beyond the [bank services], it may well be considered literally an indistinguishable part of the [banking services]. Accordingly, a national bank’s sale of such hardware is permissible as a part of the [service] permitted under 12 U.S.C. 24(7), just as the bank’s sale of checkbooks to its customers is a permissible part of offering checking accounts.

OCC Interpretive Letter No. 345, *reprinted in* [1985-1987] Transfer Binder] Fed. Banking Law. Rep. (CCH) ¶ 85,515 (July 9, 1985). *See also*, Conditional Approval No. 221, *supra*.

The software to be sold by the LLC appears to be limited purpose, and thus is part of the permissible certification authority infrastructure system function. Moreover, a national bank can sell software where the software will enable the bank customer to receive or utilize other services from the bank such as a specialized payment service or informational services. See OCC Interpretive Letter No. 516, *reprinted in* [1990-1991 Transfer Binder] Fed. Banking L. Rep. (CCH) & 83,220 (July 12, 1990) (a national bank that is providing customers with a permissible database service of information relating to financial instruments can also provide software that enables the customers to download and analyze the information) and OCC Interpretive Letter No. 419, *reprinted in* [1988-89 Transfer Binder] Fed. Banking L. Rep. (CCH) ¶85,643 (February 16, 1988) (a national bank that is providing customers with a permissible electronic transactional and information service can provide software that enables customers to participate in the system). Clearly, the software to be provided by the LLC in this case is necessary to participate in the LLC system. *See*, Conditional Approval 220, *supra* (Joint venture providing limited purpose software necessary for the system to operate is part of the underlying system service, not a separate activity, and thus part of the business of banking); and Interpretive Letter No. 419, *supra* (Joint venture may develop software to enable participants to use the system).

As part of the application process, OCC staff evaluated and assessed the LLC's proposed activities and developed a strategy for supervising these activities. In addition, OCC staff consulted with the Federal Reserve Board Supervision authorities to coordinate future supervision of the activities of the LLC that will involve state chartered banks.

The OCC has assigned to the LLC an examiner with special expertise in bank information systems to meet regularly with management to discuss their plans, monitor project management and observe trial implementations. OCC also will conduct an onsite examination of the LLC and major non-bank service providers of the LLC (in the first half of 2000), as the LLC begins operations. The team

conducting this review will consist of examiners with expertise in banking operations and bank information systems.

The scope of the review will be a thorough examination of the certification authority system, based on OCC's familiarity with the proposed activity.<sup>19</sup> The LLC is subject to OCC Bulletin 99-20, *Certification Authority Guidance*, published May 6, 1999, which describes the activities and associated risks of a certification authority system based on public key infrastructure. The issuance provides basic information and general risk analysis for banks that are considering investing in, providing services to, or operating a certification authority. As the OCC issues further guidance on certification authority activities, including those activities conducted by Participants, the LLC and its Participants will be subject to this guidance.

As part of its on-going supervision of the LLC, the OCC will monitor developments in the implementation of the risk management plan that identifies all specific material risks and identifies the mechanisms the LLC will use to manage and monitor those risks, including a description of proposed control and monitoring mechanisms. The Applicant Banks are well capitalized and well managed institutions and have the willingness and ability to provide the capital necessary to support the certification authority activities. The OCC expects the LLC to maintain an adequate level of capital based upon, among other factors, the level of operations of the LLC, the level of risk in those operations, and the working capital needs of the LLC. The OCC will evaluate the adequacy of such capital as part of its on-going supervision of the LLC.

2. *The Banks must be able to prevent the enterprise from engaging in activities that do not meet the foregoing standard, or be able to withdraw their investment*

This is an obvious corollary to the first standard. It is not sufficient that the entity's activities are permissible at the time a bank initially acquires its interest; they must also remain permissible for as long as the bank retains an ownership interest.

The LLC Agreement ("Agreement") under which the LLC was formed contains provisions to ensure that the LLC will engage only in activities that are permitted for national banks and the subsidiaries. In particular, the Section 2.5 of the Agreement provides: "The [LLC] shall not directly or indirectly carry on any activity that would prohibit a New York State chartered bank, a national bank, a member bank of the Federal Reserve System or a Founding Member from being a Member [of the LLC]." In addition, the Section 9.5 of the Agreement permits a member to withdraw if the LLC engages in any impermissible activity.

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<sup>19</sup> OCC has been supervising the activities of an operating certification authority business since January 1998, when the agency issued an approval for Zions First National Bank to operate Digital Signature Trust as a subsidiary of the bank. See Conditional Approval No. 22

Accordingly, the second standard is satisfied.

3. *The Bank's loss exposure must be limited, as a legal and accounting matter, and the Banks must not have open-ended liability for the obligations of the enterprise*
  - a. *Loss exposure from a legal standpoint*

A primary concern of the OCC is that national banks should not be subjected to undue risk. Where an investing bank will not control the operations of the entity in which the bank holds an interest, it is important that a bank's investment not expose it to unlimited liability.

In the present case, the Applicant Banks' risk of loss will be limited by both the corporate veil of the operating subsidiaries and by Delaware law. As a legal matter, investors in a Delaware limited liability company do not incur liability with respect to the liabilities or obligations of the limited liability company solely by reason of being a member or manager of the limited liability company. Del. Code Ann. Tit. 6, §18-303 (Michie Cum. Supp. 1996).<sup>20</sup> Thus, the Applicant Banks' loss exposure for the liabilities of the LLC will be limited by statute and by the Agreement establishing the LLC.

- b. *Loss exposure from an accounting standpoint*

In assessing a bank's loss exposure as an accounting matter, the OCC has previously noted that the appropriate accounting treatment for a bank's less than 20 percent ownership share or investment in a corporate entity is to report it as an unconsolidated entity under the equity or cost method of accounting. The Applicant Banks have advised that the accounting treatment for their investment in the LLC (through the operating subsidiaries) is under the cost method of accounting. Under the cost method of accounting, losses recognized by the investor will not exceed the amount of the investment (including extensions of credit or guarantees, if any) shown on the investor's books.

Accordingly, for legal and accounting purposes, the Applicant Banks' potential loss exposure should be limited to the amount of the investment. Since that exposure will be quantifiable and controllable, the third standard is satisfied.

4. *The investment must be convenient or useful to the Bank in carrying out its business and not a mere passive investment unrelated to that Bank's banking business.*

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<sup>20</sup>In addition, the Section 5.2(b) of the Agreement specifically provides that none of the members shall be personally liable for any debts, obligations, or liabilities of LLC.

A national bank's investment in an enterprise or entity must also satisfy the requirement that the investment have a beneficial connection to the bank's business, *i.e.*, be convenient or useful to the investing bank's business activities, and not constitute a mere passive investment unrelated to that bank's banking business. Twelve U.S.C. § 24(Seventh) gives national banks incidental powers that are "necessary" to carry on the business of banking. "Necessary" has been judicially construed to mean "convenient or useful".<sup>21</sup> Our precedents on bank non-controlling investments have indicated that the investment must be convenient or useful to the bank in conducting *that bank's* business. The investment must benefit or facilitate that business and cannot be a mere passive or speculative investment.<sup>22</sup>

In this instance, the Applicant Banks' interest in the LLC is not merely evidence of an investment, but the Applicant Banks are themselves Participants in the LLC System. Thus, the investment is the result of a strategic business relationship created between the Founding Members to develop and engage in the digital identity certification business, which is to be conducted as a part of each Bank's banking business as a service to the customers of each Bank. Thus, the investment is not a mere passive investment unrelated to Applicant Banks' banking business.

Accordingly, the fourth standard is satisfied.

### C. Conclusion

Based upon the information and representations you have provided, and for the reasons discussed above, we conclude that the Applicant Banks may invest in LLC, and that the application is approved subject to the conditions:

1. The LLC may engage only in activities that are part of, or incidental to, the business of banking;
2. The Applicant Banks, through their respective operating subsidiaries, will have veto power over any activities of LLC that are inconsistent with Condition 1, or will withdraw from LLC in the event it engages in an activity inconsistent with Condition 1.
3. The Applicant Banks will account for their investment in the LLC under the equity or cost method of accounting;

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<sup>21</sup> See *Arnold Tours, Inc. v. Camp*, 472 F.2d 427, 432 (1st Cir. 1972).

<sup>22</sup> See, *e.g.*, Interpretive Letter No. 543, *reprinted in* [1990-1991 Transfer Binder] Fed. Banking L. Rep. (CCH) ? 83,255 (February 13, 1991); Interpretive Letter No. 427, *reprinted in* [1988-1989 Transfer Binder] Fed. Banking L. Rep. (CCH) ? 85,651 (May 9, 1988); Interpretive Letter No. 421, *reprinted in* [1988-1989 Transfer Binder] Fed. Banking L. Rep. (CCH) ? 85,645 (March 14, 1988).

4. The LLC will be subject to OCC supervision, regulation, and examination;<sup>23</sup> and
5. The LLC will notify all potential service providers in writing of the OCC's examination and regulatory authority under 12 U.S.C. § 1867(c) and that all provider contracts shall stipulate that the performance of the services provided to the LLC is subject to the OCC's examination and regulatory authority.

Please be advised that all conditions of this approval are "condition[s] imposed in writing by the agency in connection with the granting of any application or other request" within the meaning of 12 U.S.C. § 1818.

Sincerely,

/s/

Julie L. Williams  
First Senior Deputy Comptroller  
and Chief Counsel

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<sup>23</sup> This examination authority will be in addition to the authority vested in the OCC by the Bank Service Company Act over the LLC. 12 U.S.C. § 1867