Interpretive Letter #888
May 2000
12 USC 24(7)

March 14, 2000

Joseph R. Bielawa
Vice President and Assistant General Counsel
The Chase Manhattan Bank
Legal Department
270 Park Avenue, 39th Floor
New York, New York 10017

Dear Mr. Bielawa:

This responds to your request for confirmation of the legal permissibility of a proposed electronic storage and retrieval system, offered to external clients, for financial and nonfinancial documents. Chase Bank of Texas, National Association (“Bank”) and its affiliates (collectively referred to as “Chase”) have developed a system to facilitate the conversion of Chase from a paper-based check processing environment to an imaged-based environment. The Bank proposes to use the excess capacity in this specialized system, beyond what is necessary for Chase’s internal needs, to allow external clients to load, store and retrieve nonfinancial and financial documents. For the reasons below, and based on the representations and information provided, we find that such activities are permitted by the National Bank Act and are consistent with precedent of the Office of the Comptroller of the Currency (“OCC”).

A. Background

Electronic imaging systems use digital technology to capture, index, store, and retrieve electronic images of paper documents. This technology is becoming increasingly important to the banking industry. The core technological system developed for the Chase imaging project, initiated in 1995, 1

1 “Chase” collectively refers to the bank and nonbank subsidiaries of The Chase Manhattan Corporation that have benefited from the implementation of the conversion, primarily: The Chase Manhattan Bank, New York, NY; Chase Manhattan Bank USA, N.A., Wilmington, DE; Chase Manhattan Private Bank, N.A., Tampa, FL; Chase Manhattan Bank and Trust Company, N.A., Los Angeles, CA; Chase Manhattan Bank Delaware, Wilmington, DE; and Chase Bank of Texas San Angelo, N.A.

is the Archive (the “Chase Archive” or “Archive”) which has the capability to load, store, and retrieve images of checks and statements. The Archive uses special cameras to capture images on high-speed check sorting image devices. This system reduces the number of times a check physically needs to be handled to, in most cases, one time, instead of twelve. The Chase Archive also provides a central repository for check images and statements and reduces much of the manual intervention inherent in most check operations.

1. Design of the Chase Archive

In designing the system, the project’s technology supplier recommended a system running on massively parallel computers, utilizing large scale robotic tape systems and high feature/functionality disk systems so that Chase’s capacity and performance requirements would be matched.3 The computer platform was selected because of the volume of checks processed by Chase on a daily basis and the peak demand nature of that processing that compresses operational timeframes.

Even though the Archive comprises one logical system, the Archive is designed to perform the following three distinct functions:

- Loading – Activities involved with receiving, loading and accounting for all the various load files from multiple sources.
- Storing – The storage and maintenance (including system backups) of the images and data.
- Retrieving – The on-line and batch retrieval of the stored items.

Each of these functions has its own configuration needs that had to be considered in designing a system to accommodate Chase’s processing needs during peak periods. While a certain configuration may have created sufficient capacity for one function, when mixed with the configuration needs of the other two functions, additional capacity of a function had to be added to obtain the overall required performance. Thus, the Bank asserts that retained excess capacity was unavoidably created in meeting Chase’s image processing needs.

In determining the mix of configuration needs, it was decided that all three functions would take place across a [ ] period, with each function occupying approximately [ ]. The design point became the ability to load a day’s work within [ ] at [ ] percent utilization, thus allowing sufficient time for unforeseen errors and delays in processing.4

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3 This platform consists of computers (repackaged into a modular unit to be connected in frames). The frame sits upon a high-speed switch, which allows the processors to communicate with each other and for systems within multiple frames to communicate with each other. While each system acts independently, together they comprise one logical system, i.e., massively parallel.

4 The [ ] percent utilization factor is a standard system practice of building in an idle capacity buffer because it provides for a more efficient design than one that operates at one hundred percent capacity. The buffer allows the system to accommodate spikes in activity as well as growth in usage without adding additional hardware. It also serves to minimize the risks to the Bank’s substantial capital investment in the Archive, the Bank’s check processing ability, and the...
With regard to load capacity, once it was decided that the design point was the ability to load a day’s work in [ ] at [ ] ( ) percent utilization, the appropriate hardware necessary to accommodate the load during peak periods of late evening and early morning was selected. This capacity power far exceeds the processing power that is required during the rest of the day, leaving excess capacity in the Archive’s loading function everyday when it is idle or significantly underutilized.

On storage capacity, the Chase Archive has both disk and tape storage in order to handle the differing storage needs of the particular client or application. Disk based systems permit retrievals in subseconds, but are more expensive. Conversely, tape based retrievals occur in seconds, but are less costly. Thus, the Archive is designed to provide the most appropriate mix of disk and tape storage.

A significant amount of disk capacity is necessary to process the load files that are transmitted to the Archive by Chase. Once the files arrive, they are copied to the disk and then loaded to magnetic tape for long term storage. Once the files are loaded, they are deleted from the disk. This activity occurs during peak load time; the rest of the time this disk storage capacity remains idle and sits empty.

Thus, for long term storage, the Archive also uses multiple automated tape silos, containing up to 6,000 high capacity tape cartridges and up to 40 tape drives or transports and a robot arm that retrieves requested tapes and loads them into an available drive. The amount of tape storage capacity is not solely determined by the amount of information to be stored. The determining factor is the speed of information retrieval from the tapes during peak times. The Bank needs to have sufficient tape drives available to handle the volume during peak times, thus creating the excess capacity.

Chase franchise/brand should the project fail. Image processing is contingent upon all of the Bank’s daily processing; i.e., as checks are received they must be prepared for capture, then captured, then balanced before the resulting files can be released. Because the Chase Archive is at the “end of the line,” any and all delays in the process will impact the “start” time for the load process. Hence, the design point was for the Archive always to be in a position to accommodate both the day to day volume changes and the normal processing delays.

5 For example, checks may be stored on tape for six months while statements may be stored on disk for one year.

6 Disk technology provides the highest levels of speed, protection, redundancy, and intelligence in the market place. It is particularly suitable for special functions. For example, the Archive uses disk storage for the following: storage of the operating system, languages and utilities; storage of the archive index data base; temporary working space to load transmitted image files; and temporary storage for those images that require a high speed retrieval rate for a short period such as: exception items required to be dispositioned on Day Two, non-sufficient funds (NSFs), large item review, stop payments.

7 A typical configuration would be eight tape drives to a silo and three silos to an archive. Each silo is operated by one internal robot with two hands that retrieve and load tapes as directed.

8 A robot arm can only service a limited number of requests within an hour. In the Chase Archive, the ratio between robotic arms and tape drive is one to eight. This means that for every eight drives, there is one robot, which equates to one silo. This configuration leaves a tape capacity of 5,500 cartridges per silo. The total number of drives deployed is forty, which equates to five robots and silos. This ratio is necessary to accommodate check retrievals during peak times and high volume spikes. During these times, most of the drives are utilized. At other times, there is significant unused retrieval capacity when the drives are underutilized, significantly underutilized, or completely idle.
2. **Use of the Chase Archive**

The capacity of Archive’s retrieval functions was dictated upon the ability to process checks during peak retrievals. As mentioned above, this resulted in excess storage capacity. For every year the Bank uses the Archive, it will only consume seven percent of its total capacity. At the end of seven years, the Bank will have only consumed half of the available capacity.

While the Chase Archive was designed primarily to handle the 12 million checks Chase currently processes, the Bank discovered that the Archive has the ability to load, store and retrieve any document. The systems and technology were insensitive to the size or type of images and could load, store and retrieve virtually any document, including blueprints, data files, and computer reports, in addition to checks. The Bank considered that this competency, coupled with the immense capacity of the Archive, created an opportunity to realize more fully the potential value of the system. After polling both internal and external clients, the Bank determined that there was a market for the Archive’s services and began offering the Archive services to other Chase business units for purposes other than check processing. Currently, 10 Chase units use the system, with 11 others in process of implementation. The Bank also began marketing the Archive’s services, known as “I-Vault,” to external clients for the storage and retrieval of financial documents. However, excess capacity still remains even after this expanded deployment of I-Vault.

The Bank reports that limiting I-Vault’s usage to financial documents has impaired its ability to market effectively I-Vault’s services externally because it prevents the Bank from promoting and providing I-Vault’s maximum potential value to customers, i.e., its capacity to load, store and retrieve any document, not just financial documents. The Bank has found that limiting its processing to financial documents has confused customers because there is no “bright line” as to what would qualify as a financial document for purposes of I-Vault. In many cases, the financial or nonfinancial nature depends on the context in which the document is generated. Customers have indicated that there would be more demand for I-Vault services if it could provide a complete solution to their document storage and retrieval needs. As a result, some interested customers ultimately decided against relying upon I-Vault for their storage and retrieval needs. Consequently, the Bank believes that unless the I-Vault services are expanded to include non-financial documents and data, it will be unable to obtain full economic value from its investment in the Archive.

The Bank expects that 90 to 95% of the customers that would use I-Vault for nonfinancial documents would be existing Chase customers. It commits that any new customers would be screened pursuant to “know your customer” standards. The Bank also commits that the contract for I-Vault services would contain provisions prohibiting the storage of illegal materials and limiting the Bank’s liability. The addition of external customers also would not conflict with the Bank’s ability to meet its processing demands during peak periods. Prior to accepting a client’s storage business, the Bank would analyze the client’s requirements to ensure that they would not conflict with Chase’s needs. If an external client’s needs could not be managed within Chase’s timeframes, the Bank would not accept the client. Finally, the Bank has committed to take a number of measures to ensure that the integrity of the bank documents stored in the Archive would not be comprised by the addition of
more external documents. The Bank would permit customer encryption of stored data to assure
privacy and security, and would provide appropriate firewall and password security to the Archive.

B. Discussion

The National Bank Act provides that national banks shall have the power:

[t]o exercise . . . all such incidental powers as shall be necessary to carry on the
business of banking; by discounting and negotiating promissory notes, drafts, bills of
exchange, and other evidences of debt; by receiving deposits; by buying and selling
exchange, coin, and bullion; by loaning money on personal security; and by
obtaining, issuing, and circulating notes. . . .


The Supreme Court has expressly held that the “business of banking” is not limited to the
enumerated powers in 12 U.S.C. § 24 (Seventh), but encompasses more broadly activities
that are part of the business of banking. See NationsBank of North Carolina, N.A. v Variable
established that banks may engage in the activities that are incidental to the enumerated
powers as well as the broader “business of banking.”

Prior to VALIC, the standard that was often considered in determining whether an activity was
incidental to banking was the one advanced by the First Circuit Court of Appeals in Arnold Tours,
Inc. v. Camp, 472 F.2d 427 (1st Cir. 1972) (“Arnold Tours”). The Arnold Tours standard defined an
incidental power as one that is “convenient or useful in connection with the performance of one of
the bank’s established activities pursuant to its express powers under the National Bank Act.”
Arnold Tours at 432 (emphasis added). Even prior to VALIC, the Arnold Tours formula represented
the narrow interpretation of the “incidental powers” provision of the National Bank Act. OCC
Interpretive Letter 494 (December 20, 1989). The VALIC decision, however, has established that the
Arnold Tours formula provides that an incidental power includes one that is convenient and useful to
the “business of banking,” as well as a power incidental to the express powers specifically

1. Permissible Imaging Services

The providing of electronic imaging of financial and nonfinancial documents for the Bank and its
internal clients are legally permissible under 12 U.S.C. § 24(Seventh). The provision of electronic
imaging and retrieval services to banks and other financial institutions is clearly part of the business

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9 Customers would encrypt the images at capture prior to providing them to the Bank. The Bank would not have the
decryption key and would be unable to view the images. Customers would be responsible for the distribution and security
of access at their locations.
of banking. Many banks and financial institutions use and are developing a competency in electronic imaging systems to process and store their documents efficiently.

Likewise, the marketing of I-Vault to non-financial institution customers to load, store, and retrieve financial documents is legally permissible. In a variety of contexts, the OCC has concluded that providing banking or financial recordkeeping services to customers either directly or by means of electronic technology is part of the business of banking. More specifically, OCC has found that providing image processing services to non-banks for financial data and documents is part of the business of banking.

Finally, OCC has also found that, as a permissible incidental activity, national banks may market good faith excess capacity in their imaging processing equipment to non-financial institutions for use in processing non-financial data and documents. Thus, the core issue here is whether the Bank’s Archive has good faith excess capacity. For the reasons below, we conclude that the Bank’s proposal to expand I-Vault’s product offering to include the electronic loading, storage, and retrieval of nonfinancial documents for non-financial institutions involves the marketing of good faith excess capacity.

2. Test for Good Faith Excess Capacity

The OCC and the courts have long held that if a bank acquires excess capacity in good faith to meet the needs of the bank or its customers, the bank may use the excess capacity profitably even though the specific activities involving the excess capacity are not, themselves, part of or incidental to the

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10 See Interpretive Letter No. 805, supra (business of banking includes providing electronic imaging services for other banks and financial institutions).

11 See, e.g., OCC Bulletin 94-8, supra, and Remarks of Comptroller Eugene A. Ludwig Before the Women In Housing and Finance Technology Symposium (December 4, 1996). Changes in technology require banks to develop new core competencies that, in time, can become part of an expanded business of banking. See Conditional Approval No. 267 (January 12, 1998)(acting as a certification authority is part of the business of banking is part of the business of banking because it involves and exercise of the core competence of verifying the identity of a sender of an electronic message). Moreover, banks already have a core competence in safe keeping of items and documents. Id. Cf. Colorado Nat’l Bank v. Bedford, 310 U.S. 41 (1949). Sometime in the future, banks may well develop such a high degree of competence in the processing, storage and retrieval of images, in order to support new approaches to payments processing, that imaging processing and storage may become part of the business of banking. See footnote 2, supra.


13 Interpretive Letter No. 805, supra.

14 Id.
business of banking. This doctrine has been applied to excess capacity in real estate, electronic facilities, and non-electronic facilities. Further, this doctrine applies to the acquisitions of companies as well as equipment and facilities.

The excess capacity doctrine recognizes that a bank acquiring an asset in good faith to conduct its banking business should, under its incidental powers, be permitted to make full economic use of the acquired property if use of the property for purely banking purposes would leave the property underutilized. The underlying rationale is essentially that of avoidance of economic waste. The market price of the acquired property necessarily reflects its potential full economic use and if a bank cannot obtain that full economic value from owning the property, the bank would incur economic waste and could be unable to purchase the property it needs for its banking business. Thus, in the leading case of Brown v. Schleier, supra, the court observed:

Nor do we perceive any reason why a national bank, when it purchases or leases property for the erection of a banking house, should be compelled to use it exclusively for banking purposes. If the land which it purchases or leases for the accommodation of its business is very valuable, it should be accorded the same rights that belong to other land owners of improving it in a way that will yield the largest income, lessen its own rent, and render that part of its funds which are invested in realty most productive.

Similarly, the OCC has said regarding excess computer capacity:

If a bank . . . has legitimately acquired data processing equipment with excess capacity, it need not allow the excess capacity to go unused. Thus, the bank . . . may, incident to its legitimate acquisition of that equipment, sell the excess time even where the data processing services thus sold will not be data processing functions which are, of themselves, part of the business of banking. This allows a bank . . . to lower its costs of performing those data processing services which part of the banking business more profitable and competitive.


17 Unpublished letter from Mary Wheat dated April 7, 1988 (excess capacity in acquired printing equipment); Unpublished letter from William Glidden dated July 11, 1989 (excess capacity in messenger services); and Unpublished letter from Peter Liebesman dated Dec. 13, 1983 (excess capacity in mail sorting machine).

In its excess capacity letters, the OCC has recognized that good faith excess capacity can arise for several reasons. First, the excess capacity may be unavoidable where “due to the characteristics of the [desired equipment or facilities] available on the market, the capacity of the most practical optimal equipment [or facilities] available to meet the bank’s needs may also exceed its precise needs.” Interpretive Letter No. 742, supra.19 Second, with equipment, this can occur because the equipment is not marketed in a size that meets the specific needs of the bank. Third, the retention of excess capacity may also be necessary for future expansion or to meet the expected future needs of the bank.20 Finally, the excess capacity may be needed to meet situations of fluctuating need for capacity because a bank engages in batch processing of transactions or because the demand for the underlying services fluctuates so that the bank must have capacity to meet peak period demand, but consequently has periods when the capacity is underutilized.21

Based upon the discussion above, we find that the Bank acquired the excess capacity of the Chase Archive in good faith. The excess capacity resulted from the development and acquisition of the most practical and optimal equipment that would meet the Bank’s precise check processing needs that have a significant peak demand character. The Archive’s excess capacity arises from the distinct requirements for the load, store, and retrieve functions to operate during peak periods. While each function may require less capacity on its own, the combination of all three in the Archive necessitates additional capacity to counteract another function’s peculiarities.

The Bank’s ability to offer I-Vault services to external customers is based solely on the existence of the Archive. The expected revenue from offering I-Vault services to external customers for both financial and nonfinancial documents would not in and of itself have justified the Bank’s substantial investment in the Archive. The primary benefits to the Bank from the Archive result from the efficiencies gained in check processing. The Bank would not have made the investment in the Archive solely to provide electronic document storage and retrieval to its customers.

Based on the above, it is clear that the excess capacity of the Chase Archive was acquired in good faith to conduct its banking business and to accommodate future banking needs. The capacity of the platform created was the result of a complex equation that had to match processing ability and storage capacity during standard and peak times and to account for unforeseen spikes in volume and processing delays. The Bank developed its unique platform as the most practical and optimal solution that could have been acquired to meet its check processing needs.

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19 See also, Liebesman Letter, supra; Unpublished letter from Mary Wheat dated April 7, 1988; and Unpublished letter from William Glidden dated June 6, 1986.
21 Interpretive Letter No. ___ (March 3, 2000) (to be published) As noted in the preamble to the first OCC Interpretive Rule recognizing the excess capacity doctrine for technological activities, “banks must have the data processing capacity (equipment and manpower) to handle peak volumes within narrow time limits and... accordingly, the equipment and personnel may be underutilized at certain times.” 39 Fed. Reg. 14192 at 14193. See also, Unpublished Letter from Donald Melbye (August 4, 1978). The Federal Reserve Board, in considering amendments to its regulation on data processing activities by bank holding companies similarly observed: “The record of this proceeding shows that data processors that process time-sensitive data must maintain sufficient capacity to meet peak demand.... Excess capacity necessarily results from these requirements, and the sale of excess capacity is necessary to reduce costs and remain competitive.” 47 Fed. Reg. 37368 (Aug. 26, 1982)
The Bank would not significantly increase any business risks as a result of this proposal. It incurs similar risks in connection with other electronic services it provides to customers including: Information Reporting, Account Reconciliation, Remittance Banking data transmission, Investor Reporting, Home Banking, among others. Finally, the Bank has procedures in place to ensure that technology risks are managed in accordance with OCC Bulletin 98-3 (Feb. 4, 1998) regarding Technology Risk Management.

C. Conclusion

As the Bank has acquired the excess capacity in good faith and use of the Bank Archive for purely banking purposes leaves the property underutilized, we conclude that the Bank is permitted, under its incidental powers, to make full economic use of the acquired property. The Bank would accomplish this by including the loading, storage and retrieval of non-financial documents for external customers. This result would be consistent with the rationale behind the excess capacity doctrine, which is the avoidance of economic waste.

We, therefore, confirm that it is legally permissible for the Bank to use the retained excess capacity of its Archive, developed in good faith as detailed above, to permit external customers to load, store and retrieve non-financial as well as financial documents.

Sincerely,

-signed-

Julie L. Williams
First Senior Deputy Comptroller and Chief Counsel