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**Deloitte &
Touche**



***Privatization Policy and
Management Support
Government of Estonia
Activity Report October 1992***

Delivery Order No. 12
Privatization Policy and Management
Support to the Government of Estonia

Project No. 180-0014
Contract No. EUR-0014-I-00-1056-00
Eastern European Enterprise Restructuring
and Privatization Project

U.S. Agency for International Development
EUR/RME/ER

November 1992

**Deloitte Touche
Tohmatsu
International**

**Deloitte Touche
Tohmatsu
International**



**International Lending
Agencies Group**
1001 Pennsylvania Avenue, N.W.
Suite 350N
Washington, DC 20004-2505, USA

Telephone: (202) 879-5600
Facsimile: (202) 879-5607
Telex 323020 DHSILA DC

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November 30, 1992

Mr. Michael Brooks
EUR/RME
Agency for International Development
Washington, DC 20523

Re: Estonia Policy Management Support, Delivery Order No.12
Contract No. EUR-0014-I-00-1056-00
Activity Report October 1992

Dear Mike:

Enclosed please find the October Monthly Status Report for the Estonia Policy and Management Support, Delivery Order No. 12.

If you have any questions or comments, please call me.

Sincerely,


Gustavo A. Vega
Senior Consultant
Central and Eastern Europe

**ESTONIA POLICY AND MANAGEMENT SUPPORT
DELIVERY ORDER No. 12**

SUMMARY OF ACTIVITIES OCTOBER 1992

TASK 1. PRIVATIZATION POLICY GUIDANCE

ONGOING ACTIVITIES

During this reporting period, the Deloitte and Touche team finished a policy memorandum on the Privatization and the Reform of the Estonia's Banking Sector. This report presents our findings and recommendations on the evaluation of the ability of the Estonia financial sector to support the privatization programs. It is organized according to the following three topics: long term developmental issues, the legal framework, and short-term solutions.

The long-term developmental issues section explains the financing needs in the long term for the different privatization programs to be implemented in Estonia and the potential difficulties that the Estonian commercial banks might confront.

In the legal framework, the D&T Consortium analyzed the Estonian Bank Law and presents recommendations related to the current process of revising this law.

Finally, this policy memorandum presents shorter term solutions to the economic, legal, and regulatory environment necessary to develop a commercial market for long-term lending in Estonia. (See attachment A).

This document was presented to Sven Tolp, Counsel to the Bank of Estonia, Adrian de Graffereid, the USAID Representative in Estonia, and Tom Hart, the Department of the Treasury adviser in Estonia. One copy of this report will be also shared with Dan Berg of the Department of the Treasury in Washington, as requested by AID/Washington.

Deloitte and Touche is waiting for comments from the Bank of Estonia, which is currently revising the central and commercial bank laws.

NEW ACTIVITIES

During the recent visit of Deloitte and Touche staff in Tallinn, a series of meetings were carried out with Ivar Raig, the head of the Economics and Agricultural Department of the Parliament, Uku Hanni, responsible for the Housing Privatization Program at the Ministry of Economy, and Riho Rasmann, Director of the Department of State Property. The purpose of these meetings was to coordinate the implementation of the four privatization policy interventions.

A follow up activity will be to define with the Ministry of Justice, the Parliament, and the recently named ministries of Economy and Finance, the scope of work for the implementation of the four privatization policy interventions. A Deloitte and Touche consultant has been scheduled to visit Estonia during the first week of December. These four interventions are scheduled to be implemented during the first two months of 1993.

TASK 2. DESIGN AND DEVELOPMENT OF A PRIVATIZATION MANAGEMENT SYSTEM

The purpose of this activity is to provide advisory assistance in conceptualizing and designing management tools for the State Property Board and assistance in hardware identification.

The Deloitte and Touche adviser started discussion with the head of the SPB to assist them in developing and implementing a Privatization Management System, which would consist of two major elements: a privatization/municipalization proposal tracking and a database of enterprises and properties.

The Deloitte and Touche consultant assigned to the SPB to assist in the implementation of this task was recently informed by Riho Rasmann that under the new Government, the

State Property Board will be a Department under the Ministry of Finance and that its functions are yet to be defined. Because of that, the Privatization Management System assistance above mentioned should be canceled.

Riho Rassman, proposed to our adviser a new activity to be implemented under Task II. He mentioned that the Government require assistance in the process of defining privatization policies and the administrative and computerization needs. This assistance will avoid the administrative difficulties faced by the Government during the implementation of the Housing Voucher Program set up by the Decree No. 226. The scope of work for Task II is included as attachment B.

TASK 3. ASSET DISTRIBUTION PROGRAMS

A. POLICY AND PROCEDURAL ASSISTANCE

The final report was discussed by Deloitte and Touche in Washington and Riho Rassman, head of the State Property Board, who made some interesting comments. No comments were received by the Deputy Ministry of Economy or from the Chairman of the Estonia Privatization of State Property.

The final draft will be presented in December. It will include the comments made by the Government of Estonia.

B. ASSET DISTRIBUTION COMPUTER SYSTEM DEVELOPMENT

During the reporting period, the Deloitte and Touche team finished the preparation of the data dictionary, a database design diagram, a database description, screen designs, output designs, and some processing logic. Based on this information, the Estonia State Computing Centre started the designing of the computer programs. (See attachment C).

C. IMPLEMENTATION ASSISTANCE

The report including recommendations concerning appropriate administrative structure, procedures, form, staffing needs, and cost will be prepared in January as soon as the Automated Voucher System is finalized.

Training needs have been discussed with Raivo Kasema, General Manager of the Estonia State Computing Centre (ESCC). One copy of this letter is attached. Deloitte and Touche would like to discuss with you the possibility of implementing at least one of the training activities proposed by the ESCC. (See attachment D).

DRAFT

**MEMORANDUM ON PRIVATIZATION AND THE REFORM OF ESTONIA'S
BANKING SECTOR**

Introduction:

The Deloitte & Touche- Consortium has been advising the Government of Estonia on its privatization programs and policies since the early spring of 1992. Part of this work included evaluating the ability of the Estonian financial sector to support privatization. This memorandum discusses our findings and recommendations on this topic. It is organized according to the following three topics: long term developmental issues, the legal framework, and shorter term solutions. This memorandum is accompanied by a related memorandum which addresses the Bank Law of the Republic of Estonia in detail.

Long term developmental issues:

There are four privatization and asset distribution programs in Estonia. They cover the privatization of (1) housing, (2) agriculture, (3) large state owned enterprises and (4) compensation or restitution for illegally expropriated property. All of these programs rely on some form of financing to achieve maximum effectiveness. To cite the most likely examples, privatization related financing could be required under the following circumstances: 1) For individuals who do not have sufficient housing vouchers to acquire their homes and therefore require supplemental financing. 2) For individuals eligible for restitution of expropriated property who are required to repay the government for increases in the value of the property and who require financing to do so. (Article 13 of the law on the Fundamentals of Property Reform stipulates that increases in the value of restituted property must be compensated.) 3) For organizations which require financing in order to participate in the large enterprise privatization program; such as management or worker buyouts or the purchase of one enterprise by another. 4) For newly privatized enterprises which require long term capital investments to ensure their future viability. 5) For newly privatized agricultural units which might also require long term capital investments.

The common denominator of all these forms of financing is that it is long term. However, the Estonian commercial banks are not able to provide significant long term financing. Furthermore the Estonian stock market is still in a developmental stage and is not an alternative source of long term funding. Therefore our work has focused on the commercial banking system and its ability to provide long term credits.

One of the largest deterrents to long term lending by the commercial banks is the lack of a long term deposit base. This is caused by four major factors. One is uncertainty over future inflation and interest rates by both the banks and potential depositors, which makes both parties unwilling to commit to long term deposit contracts. A second factor is caused by the relative newness of the commercial banks themselves together with general economic uncertainty; depositors cannot be sure that their long term deposits will be safe.

A third factor is the nature of the individual deposit base. Almost all individuals have seen their savings shrink due to the recent economic

changes in Estonia. Furthermore, during the Soviet period the only outlet for savings was the state owned Savings Bank. This bank, which is now owned by the Estonian government, still holds the vast majority of individual savings. This seems unlikely to change in the near term for a number of reasons, the most important of which is that deposits at the Savings Bank are guaranteed by the government. Other reasons include the force of tradition; the enormous network of the Savings Bank; and the general lack of interest in consumer banking by the new commercial banks, which have not had the facilities or the inclination to pursue high volume and low income consumer business. (However, interest in consumer business appears to have grown between February and August of this year, as uncertainties about the economy dried up opportunities in the corporate banking sector.) It is also likely, although this topic was not pursued in our research, that wealthy individuals prefer the security of offshore foreign currency banking accounts for their savings.

A final important factor is that the largest sector of the Estonian economy, which continues to consist of state owned enterprises, is in many cases still tied to relationships with the former state owned banks. Many of these enterprises have past due loans to these banks and are not in a position to move their business elsewhere. Therefore they do not represent an important source of long term funding for the new commercial banks. Furthermore, because the former state owned banks are themselves in various stages of reorganization and privatization, and because most of them are assumed to have inherited weak portfolios from the Soviet period, they are not attractive candidates for deposits from new clients.

Looking at this list of factors, several key issues emerge. They include uncertainty over future interest rates and the fate of the Estonian economy generally, uncertainty over the viability of the commercial banks, a lack of surplus savings or profit by individuals and enterprises, and institutional ties by both individuals and many enterprises to remnants of the Soviet banking system. Although these factors have been discussed in the context of raising deposits, several of them also apply to the lending and borrowing environment. Banks will not lend long term and individuals or firms will not borrow long term without greater confidence in Estonia's future economic and financial stability. Therefore, a long term debt market takes time to develop naturally.

The legal framework:

The legal framework is a critical factor in this gradual development of a stable and prosperous banking sector in Estonia. Therefore we requested the American law firm of Milbank, Tweed, Hadley and McCloy to review the Estonian Bank Law and to make recommendations related to the current process of revising this law. Several of the points discussed in this accompanying memorandum bear repeating because of the important relationship that they have to overall economic and financial stability in Estonia and thus to the long term success of privatization. These topics are bank regulation, deposit insurance, bankruptcy provisions, and the relationship of the Bank of Estonia to other governmental institutions.

The ability of the Bank of Estonia to regulate the commercial banks is critical to the future stability of the Estonian financial sector. Much progress has been made in this regard over the past year, including raising requirements

for bank capital, work on improving and standardizing information provided by the commercial banks to the Bank of Estonia, and adopting the capital standards of the Basle Accord. The accompanying memorandum raises four other regulatory issues which are particularly relevant for current developments in the Estonian banking sector. These are as follows:

1. Part I, point IB regarding holding company structures: The corporate organization of banks in Estonia will become more complex as Estonian enterprises begin to privatize on a large scale and as banks have opportunities themselves to participate in privatization, for example by underwriting and by investing in privatizing enterprises. The discussion of holding company organization addresses the regulatory aspects of this growing complexity. The discussions of the permissible level of share ownership by banks in Part I 1C, and of transactions among affiliates in Part V are also relevant.
2. Part I, point IV regarding bank mergers: The new capital requirements for Estonian banks are likely to result in some bank mergers. The accompanying memorandum suggests that the Bank Law specify what authority the Bank of Estonia will have in reviewing these mergers.
3. Part II, point 1C regarding branches and agencies: The memorandum suggests that the Bank of Estonia increase its ability to regulate the formation of branches and agencies. This is also appropriate in light of the expansion of banks and banking services that can be expected to accompany privatization.
4. Part III regarding international operations: The internationalization of Estonia's banking system will increase as privatization proceeds. Part III of the accompanying memorandum recommends that the Bank of Estonia establish some authority over the international operations of Estonian banks. The section on holding companies referred to above also notes the importance of specifying who can own banks, which applies to foreign ownership as well.

Deposit insurance is a topic closely related to banking regulation because it also increases the stability of the financial system. In the United States, for example, the introduction of deposit insurance in 1934 has substantially reduced the number of bank runs since the Depression. Deposit insurance is a very complex issue, however, with a number of costs. One of the most obvious is the cost to the government of redeeming deposits in failed banks. This cost has been enormous in the United States as a result of the bank failures of the past ten years. Another less quantifiable cost is the influence that deposit insurance has on bank management; it is generally assumed that deposit insurance gives bank management a cushion that encourages them to take excess risks.

It is not within the scope of this project to advise specifically on the appropriateness of deposit insurance in Estonia. However, it is important to note that the lack of deposit insurance for the commercial banks in Estonia discourages long term deposits for two reasons. One is that there is no mitigant for the risk of making deposits with relatively new banks that are facing a very uncertain economic future. The second is that because the state owned Savings Bank does have deposit insurance, it is essentially doubly risky for individuals to place deposits with the commercial banks. (This assumes that the commercial banks are interested in accepting consumer deposits.)

A partial solution may exist in Article 35 of the Bank Law, which states that the Bank of Estonia will supervise the establishment of a deposit insurance fund by the commercial banks. This fund is also mentioned in Article 19 of the Bank of Estonia's statutes. This fund would certainly not be large enough to insure all deposits, but it could provide some added confidence to depositors. It is our understanding that this fund has not yet been established and that there are no specific plans for doing so. The possibility that this fund will be established independently by the commercial banks was also mentioned during our research. We believe that if this fund is to be established it would be appropriate for the Bank of Estonia to take an active role in its development and supervision.

It should also be noted that if the Savings Bank is sold within several years, as is currently anticipated, the issue of deposit insurance in Estonia will have to be revisited.

Another issue related both to bank regulation and to deposit insurance concerns bankruptcies. Depositors need to know what their rights will be in case a bank holding their deposits becomes insolvent. The accompanying memorandum outlines issues concerning bank insolvency that could be considered in connection with the planned revisions to Estonia's Banking Law. It should also be noted Article 57 in the Banking Law, which gives the Bank of Estonia authority to declare one year moratoria for banks in difficulty, may be overly general. The more clarity there is about how these moratoria will work the more likely they are to increase depositor - as well as investor - confidence. For example, will depositors be able to withdraw their funds during the moratorium period? Under what conditions? What criteria will be used to establish a moratorium? What will be the distinction between banks that are declared bankrupt and those that are given a moratorium?

Moving from the funding base of banks to their lending operations, two important aspects of the legal framework are the Law on Bankruptcy, which became effective in September, and a law on secured lending, which we understand is currently in draft form. It should be expected that when this second law is passed and becomes effective, and when the courts have had some experience working with the Law on Bankruptcy, that this will have a positive influence on the willingness of commercial banks to make longer term loans.

The final issue related to a stable economic and financial environment concerns the relationship of the Bank of Estonia to other institutions in Estonia, particularly Parliament and the Ministry of Finance. We understand that it is intended to provide the Bank of Estonia with the maximum level of independence, comparable to the position of the Bundesbank in Germany and the Federal Reserve System in the United States. We agree with the recommendations made by the Bundesbank that this independence could be most effectively ensured if it were more thoroughly elaborated upon in the Banking Law. The current provisions may be adequate for the nature of Estonia's economy today, but, as the economy becomes increasingly complex, more and more questions will arise about what financial responsibility lies where. Therefore we recommend that the precise nature of the Bank of Estonia's relationship with the Ministry of Finance be spelled out in the law.

For example, the recently amended Article 8 of the Bank Law states that the Bank of Estonia is responsible for regulating monetary circulation and for maintaining the stability of the kroon's exchange rate. Responsibility for monetary policy is arguably implicit in these activities, but it would be much clearer to make this responsibility explicit. (We understand that the Bank of Estonia is in fact responsible for monetary policy.) Another example is in the amended Article 8.2 of the Bank Law, which states that the Bank of Estonia participates in formulating the economic policy of the Republic of Estonia. As the Bundesbank pointed out with regard to the previous Article 8.2, it is not clear whether, in this process, the Bank of Estonia is to give priority to maintaining price stability. What guidelines is the Bank of Estonia to follow if the economic policy of the Republic of Estonia contradicts its other responsibilities, such as the maintaining the stability of the kroon's exchange rate? Consideration should be given to how such issues would be resolved. It might also be helpful to spell out exactly how the Bank of Estonia will participate in formulating economic policy. For example, will it be required to submit certain reports, participate in certain committees, etc.

One organizational factor which influences the degree of a central bank's independence concerns the tenure in office of the central bank's board members. The central bank's independence increases the less it is dependent on the existing political and governmental authorities for the positions of its board. This factor might be considered in relation to Estonia's future plans for the frequency of parliamentary elections and the length of tenure of central bank board members.

Other common central banking functions which are not elaborated upon in the current Bank Law include supervision of the bank payments system and the interbank market, as well as open market operations and use of reserves to implement monetary policy. All of these are areas that will grow in complexity as the Estonian market economy grows in connection with privatization. Therefore it is advisable to lay the groundwork in the Bank Law for the Bank of Estonia's authority and capacity in these areas. These topics are also mentioned in the accompanying memorandum.

Shorter term solutions:

The discussion to this point has focused on the economic, legal and regulatory environment necessary to develop a commercial market for long term lending in Estonia. Currently the Bank of Estonia and the Government of Estonia are taking the necessary steps to create this environment, but to do so successfully will require time. Since the privatization programs are already in various stages of implementation and, as noted at the outset of this report, all of these programs require long term finance to be maximally effective, other more immediate steps will have to be taken.

One partial solution which we understand is already being developed is the creation of a government owned bank to provide housing finance. The major advantage of this solution is that it can be accomplished quickly, while the market oriented solutions that have been discussed above cannot. However, establishing a government owned bank raises other issues as well. The first issue is whether this is the most cost effective way of creating a mortgage finance market. As is discussed in more detail below, there may be more effective ways to spend the money that will be required to establish and

manage this bank. A second issue is that establishing this bank will delay the development of a private mortgage market, because there will no longer be a market demand for it. We question whether this is the intended outcome of establishing this bank. Finally, we understand that it is intended to sell this bank to the public after several years. This goal may conflict with other reasons for establishing this bank, which could include, for example, providing subsidized mortgages to individuals trying to supplement their housing vouchers to purchase their homes. A bank with a significant portfolio of non market rate loans could be difficult to sell.

It might also be appropriate to estimate the initial demand for consumer finance in the form of mortgages and "restitution financing". If the initial demand is quite small, which could be the case due to the general economic uncertainty, then forming a new bank would not be necessary.

The need for financing related to Estonia's privatization programs creates an extremely important opportunity for the Bank of Estonia and the Government of Estonia to make decisions about the future of Estonia's banking system. With deposits currently insured only by the state owned Savings Bank, and with the likelihood that mortgages will be provided by a new government owned bank, the result will be that this important banking sector will be dominated by the government for the foreseeable future. It is important to determine whether this is the government's actual long term goal or whether this is the result of other decisions being made to address pressing problems.

In the belief that the market can often provide services more cost effectively than government institutions, we recommend that consideration also be given to other means for providing long term home purchase financing. One possibility, which is described in more detail in the addendum, is to create a note finance program in which individuals will gradually repay the government for the purchase of their home, but no funding will ever take place. The banks could play various roles in administering and sharing risk on these notes, which would enable them to develop experience in long term lending. This approach could also be used to provide financing to individuals who must repay the government for increases in the value of their restituted property.

We are aware that there was a pilot program in the spring of 1992 to provide subsidized funding for new home construction through the state banks and that the results were not positive. Although we do not know the details of this program, it is generally believed that below market interest rates do not increase the participation of the lower income groups for which such programs are often designed. Furthermore, government provided interest rate subsidies could become extremely expensive to the Estonian government if interest rates remain high. The recommendation in the addendum is to avoid the funding problem for consumer loans entirely by creating a note finance program. However, if this is not possible, another approach could be for the government to commit to placing long term deposits directly with the commercial banks. This could help to provide stability to commercial bank funding and therefore encourage long term lending. It could even be possible to make some long term lending a condition of receiving long term government deposits.

The Estonian commercial banks will also need to develop expertise in long term lending. As was mentioned earlier, a law on security interests will be important for enabling the banks to increase the creditworthiness of long term loans. Another way to encourage prudent long term lending could be to establish a guarantee program in which the government shares risk with the banks on long term loans. This guarantee program could be used for all forms of long term lending in Estonia, from individual mortgages to project finance for newly privatized enterprises. A guarantee program could both encourage banks to make longer term loans and it could also provide the government with an opportunity to influence the credit approval process. Overall, however, the need for training and experience in making long term loans cannot be overstated.

There are two other banks that have already been established or are in the process of being established which will also focus on long term lending. One is the Hypotek Bank, based on branches of the former state-owned Agriculture Bank, which will focus on secured lending to the agricultural sector. It is our understanding that this is a privately owned bank. The second is the Estonian National Investment Bank, which will focus on project financing. We understand that this bank will be majority owned by the Bank of Estonia. The Estonian National Investment Bank could play an important role in filling some of the financing requirements of newly privatized large enterprises. However it is not clear whether this will be the case, because the bank may focus on foreign currency lending.

We believe it is important that no government owned bank has a complete monopoly in any sector of long term lending. Although the government may consider it necessary to create some banks to meet critical financing needs, it should also leave room for the natural and slower development of long term lending capabilities in the private sector. The more competition there is in this market, the more efficient it is likely to be. One way to accomplish this goal by means of the Estonian National Investment Bank, especially if it will be making local currency loans, is for it to syndicate some of these loans with the Estonian commercial banks. Participating in these loans with a more experienced bank would be extremely valuable experience for the commercial banks.

Conclusion:

The natural development of a healthy banking sector with the capacity to make long term loans takes time. Not only must there be an appropriate legal and regulatory environment, but people and firms must have sufficient confidence in the future to be willing to borrow long term. In addition, banks must have the funding base, the experience, as well as their own confidence in future economic developments to be willing to lend on a long term basis. We believe that the Government of Estonia and the Bank of Estonia are taking the appropriate steps to ensure that these time consuming processes will come to a positive fruition. The accompanying memorandum describes in detail possible changes to the Estonian Bank Law which could assist in encouraging these long term processes. However, because privatization is underway and certain long term financing requirements will arise in the near future, more immediate steps must be taken as well. This memorandum has made several suggestions in this regard. The most important theme of these suggestions is that any steps which are taken now, including possibly the establishment of

new government owned banks, should take care not to preclude the natural and necessarily slower development of long term lending by the commercial banks.

Deloitte & Touche,
October 30, 1992

Consortium

ADDENDUM: OUTLINE OF PROPOSED HOUSING FINANCE PROGRAM

The system outlined in this addendum emphasizes the utilization of Estonia's consumer banking sector in implementing a credit program to support housing privatization. Consumer banking and housing finance are important financial sectors that have been relatively undeveloped to date by the Estonian commercial banks. Development of these areas will provide Estonian citizens with the benefits of a market economy, and will also contribute to the diversification of the Estonian banking industry.

We recommend a housing finance program to supplement the housing vouchers that is based on long term notes owed by the buyers to the government. The notes (one per buyer) would evidence the buyer's obligation to pay the government according to an agreed upon schedule and terms in exchange for eventual total ownership of the living space. The critical aspect of these notes is that no money would change hands at the outset; the borrower would not go to the bank to borrow money to buy his home from the government and then repay the bank over time. Instead, the "borrower" or buyer of the home would pay the government over time and therefore buy the home over time. The principal reason for recommending this financing structure is that it avoids the requirement for banks to make long term loans, for which there is almost no commercial funding in Estonia.

The commercial banks would play one or possibly two important roles in this note program:

1. They would administer the collection of the note payments.
2. Depending on the objectives of the loan program, which are discussed below, the banks could also assume part of the risk of the notes and would therefore also be responsible for analyzing the borrowers' creditworthiness.

The advantages of the commercial banks handling the collection and administration of the notes are that it prevents the government from becoming involved in what is essentially a non-government activity. It also encourages the development of a commercial banking infrastructure to track, collect and transfer these payments. If this is the only function that the banks fulfill, it also gives them the opportunity to determine at no risk which of the borrowers are the most creditworthy and therefore potentially attractive clients. If the commercial banks are required to take part of the risk of the notes as well, this will ensure that they analyze the borrowers' creditworthiness carefully and that they apply their best efforts to collect any past due loans.

Within this general recommended framework, the following additional issues have to be addressed:

-To what degree is it a right of Estonian citizens to borrow to purchase additional housing space? The more that the ability to purchase additional space is considered a right, the lower should be the percent of risk taken by the commercial banks. If essentially all Estonian citizens have the right to borrow to supplement their housing vouchers, then the banks should not be required to assume any of the risk. A related question is whether a distinction

will be made between those who need to borrow to supplement their vouchers to continue to live where they are now, and those who wish to borrow to purchase improved space, since the prior category has a more urgent need for financing.

-How will participation of the commercial banks be organized? Should all banks be eligible to administer the notes and participate in the risk sharing (if relevant) or should participation be limited to a smaller group of banks? How could a smaller groups of banks be selected? The answer to these questions will depend significantly on the anticipated volume of housing loan demand.

(It should be noted that if loan demand is expected to be high and if one factor in bank selection is a country-wide branch network, then one of the top contenders is the Savings Bank. If the Savings Bank is to play an important role in a housing finance program, and for as long as it continues to be a state-owned bank, it should be recognized that this will not contribute to the goal of diversifying Estonia's commercial banking market.)

- Is it necessary to provide incentives to the banks to participate in this financing, or will any which are interested in consumer banking participate voluntarily? If there are to be incentives for participating in the program, what should they be? One possibility for a program with a limited number of bank participants is that they be paid a management fee by the government for administering the loans. A further possibility is that the banks be required to use part of the fee to invest in training and/or computer or other equipment necessary to optimally manage the program. It should be noted that if the banks assume part of the risk of the notes, then logically the interest income on those risk portions should belong to the banks.

-What will be the criteria for creditworthiness? Will the criteria be standardized, such as a minimum ratio of income to loan payments, or will each bank establish its own criteria? This question is related to the degree to which borrowing to supplement one's vouchers is a right or only a possible alternative.

-What will be the tenor of the notes? A primary factor in determining loan tenor is the capacity of the borrower to repay the loan within the stipulated time frame. One possibility is to establish a maximum tenor for the notes of 25-30 years, but to allow for shorter term notes if some borrowers wish to repay more quickly. There could also be incentives for prepayment.

-How will the interest rate be set? It will be simpler for accounting and administrative purposes for the notes to have a fixed rather than a floating rate of interest. Furthermore, since the notes are not being funded, there is no need to charge a floating rate to ensure that the lender is able to cover its funding costs. Therefore, a major determinant for the interest rate is the degree to which borrowing under this program is a right for all Estonian citizens. If it is a right, then the interest rate could be as low as zero. If, on the other hand, this is a more commercial program for which only creditworthy borrowers are eligible, then a fixed rate can be established administratively.

(If it is intended that as many people as possible purchase rather than rent their apartments, consideration should also be given to establishing note tenors and interest rates which result in note payment amounts that compare favorably with the cost of rental payments.)

-Will there be provisions for home improvement credit? Additional credit for home improvement would have to be funded, because the borrower would need actual cash to make the improvements. We recommend that the commercial banks be encouraged, possibly through longer term funding from the government, to provide such loans for periods of up to several years.

-How would the banks share the note risk with the government? This could be structured in several ways. At a minimum, if a borrower ceases to repay the note, the bank would lose the interest on its risk percentage share of the principal. Another possibility is to reduce the bank's fee according to the number of nonperforming loans. A further possibility is for the bank to pay the government for a defined percentage of the defaulted loans; how this percentage is determined is closely related to the procedures for note defaults discussed below.

-What will be the procedure for note defaults? Here there are two somewhat conflicting principles. On the one hand, it is necessary to have strict enough procedures to encourage borrowers to repay their notes according to schedule. On the other hand, if the penalties for default or delinquency are too high, many Estonians may not be willing to take on the risk of home financing. This is especially relevant because many Estonians face an uncertain job future due to the many changes in the economy. Therefore the recommended approach is to establish procedures for loan defaults which are rigorous, but which acknowledge the unique situation in Estonia. For example, delinquent borrowers would have the threat of eventually losing their homes, but significant efforts would be made to avoid that risk. Therefore a delinquent borrower would have the right to restructure his note at least once or maybe even twice before he would be forced to leave his home. In addition, an evicted borrower who has bought his home directly from the government could be reimbursed for a defined percentage of the equity that he has put into the home through his previous note payments. We make this somewhat unusual recommendation, because neither a bank nor the government actually loses money if a borrower cannot repay the note, because they never lent money in the first place. Therefore they do not need to be reimbursed by taking over the borrower's equity as well, which is what happens with standard mortgage loans. (The exception is if the banks have to repay part of the defaulted principal to the government as part of their risk sharing arrangement, in which case they do lose money.) However, there will need to be deterrents to default, and therefore a defaulting borrower should not be entitled to recover all of his equity. This procedure would only apply to first time buyers who are buying their homes directly from the government with notes; financing of subsequent sales should be according to standard mortgage loan principles.

-What will be the procedure when a borrower wants to move and sell his home? Here there are two considerations: 1) paying the outstanding note, and 2) paying the existing homeowner for his equity in the home. The outstanding note to the government can be handled by requiring that the new buyer take over the note and that the bank approve the new buyer's

creditworthiness. Paying for the other part of the home is more complicated, because unless the new owner has his own money, the problem of the non-existent commercial mortgage market is a stumbling block. It may turn out to be necessary for the government to provide limited long term funding to the commercial banks to encourage the more rapid development of a mortgage market for "turned over" homes. It should be stressed that this funding does not necessarily have to be subsidized; what is critical is that the banks have long term funding. Another alternative is for the government to require that all note borrowers hold their homes for a period of one year up to several years, in order to give a commercial mortgage market more time to develop. Another possibility is that the value of homes will fall if there is a very limited secondary market (due to the lack of financing), which will make them more affordable.

In addition to the above issues which need to be addressed, there are the following information needs and prerequisites for a housing finance program:

- An estimate of the number of probable borrowers. This could significantly influence the number of banks that would be involved in the financing program and the scale of preparation required.

- Standardized note to be used by all borrowers.

- A secured lending law and a method for registering security interests.

MEMORANDUM

Re: Bank Law of the Republic of Estonia
("Bank Law")

Set forth herein are observations and suggestions on the substance and structure of the Bank Law, offered from the standpoint of United States lawyers familiar with banking and finance. We do not assume that the United States model for bank regulation should be transposed to Estonia; our comments are offered for the purpose of assisting in considering the terms of the Bank Law and how they might be modified. With additional information on the desired policies and objectives of Estonia in the banking area, we can offer specific drafting or restructuring suggestions.

PART 1. GENERAL RECOMMENDATIONS.

I. Banking Powers

A. Drafting Philosophy.

A basic issue arising under the Bank Law relates to the permissible scope of banking activities. In this regard, the drafting philosophy of the Bank Law (based on the translation we have reviewed) is not entirely clear.

In the United States, the law generally provides that banks have only those powers specified by statute, as well as such "incidental" powers as shall be "necessary" to carry on the business of banking. If this concept would be appropriate for

Estonia, the Bank Law might be clarified to so state; otherwise, the parameters of "banking" may be indistinct, creating uncertainties for regulators and for the regulated alike. As one example of the problems potentially raised by Article 2 as presently written, it is not clear whether banks are permitted to engage in insurance activities, considered in some jurisdictions to be financial in nature and thus permitted to banks (or to their affiliates).

It would be helpful, too, if the Bank Law included a clearer definition of the term "bank"; as discussed below, the present definition in Article 1 appears circular. In the United States a bank is generally an institution that both accepts demand deposits and makes commercial loans. It might also be helpful to clarify that the "other operations" permitted to a bank under Article 2 are those that are closely related or incidental to those in the list set forth in Articles 2.1.1 through 2.1.14. Also, in Articles 12.3, 12.4 and 12.5, the distinction between savings unions, credit unions and commercial banks could be clarified. More generally, in order to comply with Article 3 of the European Community's Second Banking Directive, the Bank Law should clearly prohibit non-credit institutions from engaging in the business of taking deposits from the public except to the extent the deposit-taking is expressly covered by national or community legislation subject to regulations and controls intended to protect depositors and investors.

B. Bank Holding Company Structure.

In the United States, the Bank Holding Company Act of 1956 and related laws (1) generally limit the activities of persons controlling United States banks to banking-related activities, thus separating banking from commerce, and (2) enable certain activities that would be prohibited to banks themselves to be carried on in separate affiliated companies. This separation is imposed as a policy matter in part because of concern that if banks are permitted to engage in non-banking activities without restriction, they may be led into conflicts of interest or imprudent lending activities (for example, extending credit to a weak industrial company with which the bank is affiliated). In the case of non-banking financial companies (such as securities affiliates) in the holding company structure, United States law and regulation provide various limitations (sometimes called "firewalls") on dealings between the bank and its affiliates. We suggest consideration be given to the merits of providing for such a structure.

It would also be advisable to set forth in the Bank Law any requirements as to what individuals or entities may or may not own or control an Estonian bank (and to provide for "attribution" rules indicating when ownership of shares by one person or group will be attributed to another). The issue of foreign ownership of United States banks has become an important political issue in the United States. One of the major concerns is the possibility of ownership of a U.S. bank by a foreign financial institution that is itself inadequately regulated (as

apparently was the case with Bank of Credit and Commerce International). In this regard, the Basle Committee on Banking Supervision's June 1992 release on minimum supervisory standards should be noted. We would be happy to provide a copy of this release upon request.

C. Share Ownership by Banks.

We also suggest it be made clearer to what extent a bank may own shares of other companies. As an example of the policy issues presented here, a bank's ownership of a substantial portion of an industrial company may present the same risks and temptations as are noted above with respect to extensions of credit to affiliated companies.

D. Particular Activities.

Consideration might be given to whether trust activities are to be expressly permitted to banks, and if so whether there should be any special licensing or supervisory requirements for such activity. Article 2.1.14 permits banks to render consulting services; United States banking law generally distinguishes between financial and economic advice, which banks are allowed to provide, and "management consulting" which banks are not allowed to provide, and consideration might be given to limiting the areas in which it is appropriate for an Estonian bank to provide such services. If insurance activities are to be prohibited to banks, it would seem desirable to state this explicitly (and/or to provide, if appropriate, for the conduct of such activities in an affiliate in a holding company structure); regulations should then address exactly what constitutes an

insurance activity. (In today's financial markets, certain products of insurance companies are virtually indistinguishable from products offered by banks.) In light of the continued evolution of banking, it might be desirable to address bank involvement in swaps, derivatives and commodities businesses.

E. "Ultra Vires" Activity.

Article 2.6 appears to invalidate any transaction in which a bank acts beyond its powers under the Bank Law. This provision has the potential to create difficult legal problems and to make it risky for another person to enter into a contract with the Bank. There should, of course, be penalties for unauthorized activity, but the interests of the financial system may counsel against invalidating such transactions if entered into in good faith by third parties.

II. Structure of Bank Law

We feel it would be desirable for the Bank Law to provide specifically for the chartering of banks, rather than leaving such chartering up to the Enterprise Law. On the other hand, it would seem desirable that the Bank Law concentrate on the banking system and that other topics be dealt with in other Estonian laws. In this regard, several areas might best be dealt with separately in other comprehensive statutes:

Article 14 - The Taxation of Commercial Banks.

Article 39 - The Seizure of and Claims to Financial Assets and Other Valuables Deposited in a Bank.

Article 42 - Collateral. In the United States, this area is addressed generally by a specific statute governing secured transactions that is part of the

commercial laws of the individual states (Article 9 of the Uniform Commercial Code).

Article 45 - Bankruptcy (other than insolvency of banks themselves).

Article 52 - The Rights of Minors with Regard to Deposits.

Article 54 - Testamentary Arrangements of a Depositor.

III. International Operations

We assume that it is intended that non-Estonian banks operating in Estonia are to be accorded substantially the same treatment as Estonian banks - so-called "national treatment". We suggest that this basic principle be incorporated into the Bank Law, rather than being left to regulations which may frequently change. In the United States, the principle of national treatment is set forth in the International Banking Act of 1978.

We also suggest the Bank Law make provision for activities and investments of Estonian banks outside of Estonia. Although a foreign branch or subsidiary of an Estonian bank will be subject to the laws of the jurisdiction where it is located, the Estonian authorities will wish to have authority over the powers and activities of a foreign branch, and to regulate the permissible offshore investments of an Estonian bank. Under United States law, the permissible activities of a bank outside the United States are in some respects broader than its powers domestically (subject always to the legal requirements of the foreign jurisdiction).

IV. Bank Mergers

It may be advisable to address the issue of bank mergers. The statutory provisions could deal with such matters as the percentage of shareholders that must approve a merger and what level of review Bank of Estonia possesses as regulator. A number of United States laws (including the Bank Merger Act) regulate bank mergers with a view, among other things, to preventing undue concentration of financial institutions.

The Bank Law might also provide for conversions from one type of bank to another (for instance, from a savings institution to a commercial bank). Such conversions are addressed in the United States by statutory law.

V. Transactions Among Affiliates; Transactions With Insiders

In the United States, transactions between a bank and its affiliates are closely regulated. This includes transactions between a bank and its parent holding company, between different banks that are owned or controlled by the same parent holding company, and between bank and non-bank subsidiaries of the same holding company. United States law also restricts loans by banks to a single affiliate and to all affiliates, restricts the purchase by a bank of so-called low quality assets from affiliates, and prohibits banks from giving their affiliates favored treatment. These provisions can be helpful in protecting the assets of banks and preventing certain improper activities. Copies of the relevant statutes can be provided upon request.

It may be advisable to consider providing limitations on extensions of credit to, and other transactions involving, individuals associated with a bank. In the United States, loans to executive officers, directors and principal shareholders of a bank are subject to quantitative and qualitative limits. For example, United States law prohibits banks from extending credit to their own executive officers except in accordance with specified requirements; in general, such credit may be extended only if it would be authorized for other borrowers, is on terms no less favorable than those afforded other borrowers, is due and payable upon demand of the bank when the officer receives certain loans from another bank, and the officer has submitted a detailed financial statement.

Another provision of United States law provides for an individual lending limit that applies to the aggregate of an insider's personal and business interests, prohibits insider loans above an amount prescribed by the appropriate bank regulator, requires such loans to be on nonpreferential terms and prohibits overdrafts to directors and executive officers.

Another statutory provision limits purchases and sales involving directors. Such transactions must be done in the regular course of business and on nonpreferential terms. They must be approved by the disinterested directors.

VI. Other Issues

(a) In the United States, statutory law requires bank regulators to cause banks to achieve and maintain adequate levels

of capital. The regulators satisfy this requirement through the imposition of capital adequacy guidelines. Banks in the United States are subject to a "leverage" measure, by which they must maintain a certain level of "total" and "primary" capital as a percentage of "adjusted" total assets. The second major component of United States capital standards is the risk-based capital measure drawn from the Basle Accord; this method of assessing capital assigns risk weights to assets and also to off-balance sheet items.

We acknowledge and concur with Estonia's intention to follow the Basle Accord. The Basle guidelines reflect the consensus of a significant number of the major industrialized economies, and accordingly it is reasonable to expect that the guidelines will continue to serve as the international standard.

(b) Single borrower lending limits are addressed by statutory law in the United States. One typical provision restricts the loans that a federally-chartered ("national") bank may make to one borrower to 15% of its capital and surplus, plus an additional 10% if the loans are secured by "readily marketable collateral". State laws provide similar lending limits for state-chartered banks. Consideration might be given to adding such specific provisions to the Bank Law in connection with Articles 28.2 and 34.

(c) In the United States, banks are not subject to the general bankruptcy laws governing most corporations and individuals; rather, specific provisions in the banking laws address bank insolvencies. Given the important policy of

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protecting depositors whose funds are placed with banks, bank receivers and conservators have substantial powers conferred by the bank laws. Grounds for appointing a conservator or receiver are identified by statute. For example, for federally chartered banks, the relevant regulator may appoint either a conservator or receiver whenever it is found that: (i) the bank's assets are insufficient to meet its total liabilities or the bank is likely to be unable to meet its obligations as they come due; (ii) assets or earnings are being substantially dissipated in an unsafe manner or the bank is in an unsound condition; (iii) the bank is concealing records or violating governmental orders; (iv) the bank consents to such appointment, ceases to be insured or violates laws or incurs losses in such a way as to threaten the bank's solvency; or (v) the bank becomes undercapitalized and fails to take appropriate steps to become adequately capitalized.

The Federal Deposit Insurance Corporation (the "FDIC") is appointed in many cases as receiver or conservator for a failed or failing bank, and as such it possesses significant powers. For example, the FDIC may seek a judicial stay of actions against the bank, and this stay generally must be granted by a court. Another power which the FDIC possesses is the power (subject to certain conditions) to avoid the bank's contracts determined to be burdensome, if repudiation would promote the orderly administration of the bank's affairs. The FDIC also has the power as conservator or receiver to avoid certain preferential or fraudulent transfers (that is, transfers made after an act of insolvency or in contemplation of insolvency with

a view to departing from the ratable distribution of assets or to prefer one creditor over another). Other powers include the ability to charter a new bank and transfer certain assets and liabilities to it from the failed bank.

The statutory law of bank insolvencies in the United States is highly developed. Although it may not be appropriate to provide for the same level of detail in the Bank Law, some coverage of these issues is recommended.

(d) Article 35 of the Bank Law suggests that the mechanism for Estonian deposit insurance remains to be determined. In the United States, this complex area of the banking laws is currently the subject of much debate. One primary aspect of the U.S. system of deposit insurance is the existence of the FDIC, which insures the net amount due to any depositor up to \$100,000. Issues arise in determining the "net" amount (deposits must be maintained in the "same capacity" and the "same right"). Recently, the FDIC adopted a risk-based assessment system, whereby the rates that banks pay for deposit insurance coverage will be affected by the level of risk that they represent to the system. Another important debate centers on the ability of the FDIC to take actions to protect deposits in excess of \$100,000. In another development in June 1992, the Commission of the European Community approved a proposal to issue a Directive that would make deposit protection compulsory within the European Community. This is a complex area as to which more information can be provided if desired.

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(e) United States banking law contains numerous provisions designed to provide protection to consumers, such as the "Truth in Lending Act" and the "Truth in Savings Act", which contain various disclosure requirements and other rules protecting consumers. An important law is the Community Reinvestment Act, which encourages banks to extend credit and provide other services for economically depressed areas.

(f) The Bank Law might deal with electronic funds transfers. In the United States, electronic funds transfers represent an enormous flow of funds. More than \$1 trillion a day is estimated to change hands among banks through the Federal Reserve System's Fedwire system, subject to regulation J of the Federal Reserve Board. The Uniform Commercial Code Article 4A, as codified by the various states, also applies to electronic funds transfers. The United Nations Commission on International Trade Law (UNCITRAL) has also produced a model law on international credit transfers.

PART 2. SPECIFIC COMMENTARY.

A. Article 1

As noted above, the definition of "bank" in Article 1 seems circular because it defines a bank merely as an entity that carries out "bank operations". An alternative that might be helpful in determining whether a particular institution should be regulated as a "bank" would be to define a bank as an institution that engages in certain core activities that are commonly thought of as "banking".

B. Article 2

Article 2.2 seems to conflict with Article 2.3; we suggest this be clarified.

Article 2.1.10 permits banks to engage in leasing. Consideration might be given to whether Article 2.1.10 is intended to allow banks to act as lessor under so-called operating leases. United States law permits banks to lease property only on a non-operating basis, generally requiring the lease to be the functional equivalent of an extension of credit.

If Article 2.1.13 is intended to differ from Article 2.1.12, this might be clarified, or else the two Articles might be combined.

C. Article 5

Article 5.2, dealing with the establishment of branches and agencies, might be clarified in certain respects. First, it would be helpful to know what the term "notifying" is intended to signify and whether this is intended to require that commercial banks submit a written application before opening a branch or agency. The Article might be revised so as to require a license from Bank of Estonia for all branches and agencies as a prudential matter, to insure that an expanding bank has adequate capital for the expansion, and also to comply with the Basle standards for adequate supervision. The Article does not provide for authorization for the branches of foreign banks, nor for authorization to Estonian banks to establish branches abroad; it should do so in order to be consistent with the Basle standards.

The terms, "branch" and "agency" should be defined to indicate, among other things, any differences between these two types of entities.

Article 5.4 refers to "[t]he regulations of the present law". It may be advisable to clarify what regulations are referred to and whether these regulations are the only source of guidance on the founding and liquidation of banks. As noted above, in the United States, bank formation and liquidation (conservatorships, receiverships and insolvency generally) are areas extensively treated by statutory law.

D. Article 6

In Article 6.1, it may be advisable to specify what is meant by "supreme state authorities" and "official standards".

It would be helpful to clarify the effect of Article 6.2 in connection with Article 2.6 (please see the remarks above in section on Ultra Vires activity).

E. Article 12

Article 12 should be considered in light of the definition of "bank" in Article 1. The Article 12 approach is consistent with the United States approach. However, by its definition of "commercial bank", this Article raises the question of whether there are "banks" that are neither "commercial banks" nor "other credit institutions". (The definition of "other credit institutions" was deleted from the text of Article 12 by the amendments of July 8, 1992; this creates a gap, because the heading of Article 12 still refers to these entities.)

Also, it would be helpful to clarify what is meant by the phrase, "a commercial bank has also the right to carry out any other banking operations". If this is a reference back to Article 2, it could be made explicit by stating, "any other banking operations as set forth in Article 2"; otherwise it may create confusion.

We are not sure of the meaning of "blanco credits". The term "specialized credit institutions" should also be defined.

F. Article 13

In Article 13.3, dealing with bank "statutes", it would be helpful to clarify the phrase, "[t]he statute may include other regulations" and by whom these regulations are to be issued.

G. Article 15

The terms "statutory funds" and "founder and partner contributions" should be defined.

H. Article 16

It would seem that the word, "not", in the phrase "unless a different arrangement has not been established" should be deleted.

I. Article 20

Article 20.2, dealing with the grounds for refusing a banking license, does not indicate whether an administrative review procedure is contemplated. In the United States, a decision such as denying an application to establish a bank is

generally reviewable at the agency level under principles of administrative law before judicial involvement is necessary.

J. Article 30

Article 30.1.3 indicates that banks may own real estate. Consideration might be given to limiting such holdings to permitted bank real estate investments, such as for the bank's premises, rather than speculative investments.

PART 3. CENTRAL BANK.

We have focused our recommendations on the provisions applicable to commercial banks, because advice on central banking matters is largely the province of others. Nevertheless, various important matters involving the role and functions of a central bank should be considered, and accordingly we offer certain suggestions.

As a general matter, we would suggest that one statute should cover both the monetary and supervisory functions of Bank of Estonia and another statute should provide for the incorporation and regulation of commercial banks. Accordingly, the Central Bank Law should address matters such as any open market operations of Bank of Estonia and carefully define the relationship of Bank of Estonia to the Republic of Estonia. Although the Central Bank Law states expressly that Bank of Estonia is not responsible for debts of the Republic of Estonia, Article 19 states that Bank of Estonia "shall decide questions of becoming a member of international credit and financial organizations as well as concerning the state debt of the

Republic of Estonia;" these functions are arguably incompatible with the independence of the monetary authority. While it is probable that what was meant was that Bank of Estonia shall represent Estonia at International Monetary Fund or Bank for International Settlements meetings, and possibly negotiations with other countries concerning the state debt, we suggest that it should be the political organs that make decisions as to which international organizations Estonia might wish to join.

Article 3 of the Central Bank Law might be revised so as to grant to Bank of Estonia, despite its independence and self-financing character, sovereign immunity in those cases where it seems desirable to the government to insure that Bank of Estonia cannot be sued without its consent. The present language of Article 3 might make Bank of Estonia vulnerable to lawsuits by private banks for whom it carries out foreign exchange transactions.

Article 19 might be a good place to specify in greater detail Bank of Estonia's supervisory duties, including its duties with respect to international banks. The Basle standards require that a home country supervisory authority must have the practical capability of performing consolidated supervision. This means it must receive consolidated financial and prudential information on the bank's or banking group's global operations; have the reliability of this information confirmed to its own satisfaction by on-site examination or other means, and assess the information as it may bear on the safety and soundness of the bank or banking group; have the capability to prevent corporate affiliations or

structures that either undermine efforts to maintain consolidated financial information or otherwise hinder effective supervision of the bank or banking group; and have the capability to prevent the bank or banking group from creating foreign banking establishments in particular jurisdictions. Moreover, in order to comply with the Basle standards, the secrecy provision should be amended specifically to authorize the Bank of Estonia to give information to other supervisors.

The Central Bank Law should presumably give Bank of Estonia the authority to supervise the payments system as well as the interbank market. The Law might also include more specific provisions concerning reserve requirements. As presently written, it appears that reserves are viewed as a prudential measure rather than as a monetary tool. We would be happy to provide an explanation of the U.S. mechanism for using reserves to effect monetary policies if requested.

PART 4. CONCLUSION.

The above observations are necessarily somewhat general in nature since a great deal more discussion as to the policies and objectives Estonia desires to pursue in the banking area would be required in order to give comprehensive advice. However, it is hoped that the points made above will provide a basis for consideration of various possible changes in the Bank Law. Should detailed information be desired on any matter discussed above, or on any related matter (for example, the structure of a statute on secured transactions), we would be very

pleased to provide it. In addition, we will be happy to provide on request a copy of any of the United States statutes referred to above, should this be helpful.

October 22, 1992

Scope of Work for Assistance in Drafting

NEW PRIVATIZATION VOUCHER LAWS

11 November, 1992

The Government of Estonia, starting from the Popular Capital Vouchers, is planning to develop privatization vouchers in several ways: by providing for conversion of Popular Capital Vouchers to securities, and by creating compensation vouchers to meet the claims of those eligible for restitution of illegally expropriated property. A special privatization committee has been set up by the new Minister of Reform to draft the laws and decrees necessary for these developments of privatization vouchers.

The Department of State Property will probably have responsibility for these new voucher programs, as they have for popular capital vouchers used for housing privatization.

However, the Department of State Property learned in the case of the Popular Capital Vouchers that there were significant administrative difficulties in implementing Decree 226 which set up the vouchers. In particular, difficulties were encountered in developing the Automated Voucher System in the Estonian State Computing Center.

To avoid such difficulties with the new privatization vouchers, the new laws and decrees need to be written with administration and computerization considered in advance.

The work outlined in this document is meant to address this need on the part of the Department of State Property; so that any new voucher laws or decrees take account of and allow for realistic administration and computerization.

Description of proposed work

The proposed assistance in drafting of privatization voucher laws will consist of:

- meeting with the privatization committee's working group
- studying drafts of laws and decrees
- providing suggestions to the working group on improving laws and decrees in the area of administration and data processing
- keeping the Department of State Property and the Estonian State Computing Center advised of progress on the laws, and difficulties in administration and computerization

The primary benefit of the work will be that when the laws and decrees are passed, they will be easily administered so that privatization may proceed smoothly. And in particular, any computerized information systems needed to carry them out will

be already conceptualized, if not designed, as soon as they are passed.

Deloitte & Touche contribution/ Deliverables

Under Deloitte & Touche's contract with USAID, we can provide important assistance in the drafting of new privatization voucher laws. We will analyze the drafts of laws and decrees, the needs of the Department of State Property Director, and the constraints of data processing. Based on this analysis, we will provide two different deliverable items:

- Management memos on draft laws and decrees
- Conceptual Design/ Requirements Assessment of any needed data processing systems

Department of State Property contribution

The Department of State Property would also make some important contributions to the work. The Department would provide:

- access to the privatization committee and working group, including meetings and drafts of laws and decrees as necessary
- access to the State Computing Center
- regular meetings with the Director of State Property to coordinate needed changes

Proposed time plan

The detailed time schedule and work plan will depend on discussions between Deloitte & Touche and the Department of State Property. We assume that the work of the committee on privatization vouchers will mainly take place before the end of January. This is necessary to the work, because Deloitte & Touche's present work order expires at the end of February.

Agreed 11 November, 1992

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Estonian Automated Voucher System

Housing Voucher Manager

Design Document

Deloitte & Touche
2 November 1992

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Section 1.0 Introduction and Background

In August of 1992, the Government of Estonia issued Decree No. 226. This decree and its amendments govern the process and terms by which the Republic of Estonia will privatize its portfolio of state-owned private homes. Given the volume of transactions to be executed, and due to the importance of privatizing housing in an efficient and rapid fashion, the United States Agency for International Development (USAID) undertook to finance the development of an automated system to support this process. USAID selected Deloitte & Touche to perform this work under its Eastern European Enterprise Restructuring Project.

During the last year, Deloitte & Touche has worked with the Estonian Ministry of Economy, the Department of State Property (DSP), the Estonian State Computer Center (SCC), and the Bank of Estonia to define the procedures by which housing will be privatized in Estonia. Our understanding of these procedures is demonstrated in two documents published this summer by our team in Estonia. They are the Conceptual Design (completed April 17, 1992), and the Requirements Assessment (completed September 9, 1992).

This document uses these materials as well as additional interviews conducted in September of 1992 as its basis. It is intended to complete the documentation of our understanding of the needs for Housing Voucher information, and to communicate the design of the Housing Voucher Manager to the SCC and other interested parties.

The Design Document is also intended to govern the work that will be performed on a flexible and adaptable document, subject to change and update as the requirements of later project stages dictate.

We envision the development and implementation of an Estonian-language automated information system which will record and process Housing Voucher information. The system will be installed at the SCC, county offices, and those local housing offices which are supported by PCs. We expect that the majority of these equipped offices will be in and around Tallinn, where we also expect to find the greatest proportion of Housing Voucher program participants. At those offices not supported by PCs, hard copies of the voucher applications will be forwarded to county offices, most of which are supported by PCs. Any material which cannot be loaded into PCs at application collection and processing points will be forwarded to the SCC for data entry. There are no good estimates at this point as to the likely volume of data entry the SCC will be required to perform.

This document is organized as follows:

Section 1 - Introduction and Background

Section 2 - Standards and Methodologies: A brief discussion of our approach and techniques

Section 3 - Inputs: A review of the forms used in Housing Voucher privatization.

Section 1.0

Introduction and Background

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- Section 4 - Outputs: A review of outputs to be produced by the system
- Section 5 - Processing Requirements: General discussion of the operation of the Housing Voucher program
- Section 6 - Other Considerations: Outstanding issues and matters for future discussion.
- Appendix A - Data Dictionary:
- Appendix B - Database Diagram
- Appendix C - Program Hierarchy Chart
- Appendix D - Database Size Estimate
- Appendix E - Programming Specifications.
- Appendix F - Sample Forms

Section 2.0

Standards and Methodology

Our design approach is based upon Deloitte & Touche's proprietary structured analysis methodology **4-FRONT**. The **4-FRONT** methodology is a comprehensive "how-to" manual for the development of small, medium, and large information systems. It provides detailed, step-by-step instructions for planning, designing, building, and implementing integrated information systems. The methodology is modular in construction, allowing it to be adapted to the particular requirements of any given project.

The **4-FRONT** methodology employs a top-down approach which guides the user through repeated decomposition of functions into their component functions. This approach help the user to model the activity of the client organization. At the same time, the methodology is a guide for bottom-up techniques such as data analysis and normalization. For the Housing Voucher Manager, data was normalized to third-normal form and then re-examined for the sake of access and user-friendliness. Rules followed for data normalization are:

- First Normal Form:** No repeating groups within a data table
- Second Normal Form:** All data elements in a data table dependent upon the primary key for that data table.
- Third Normal Form:** All data elements in a data table independent from one another.

For this project, we studied the data requirements represented by the forms which are to be used in the Housing Voucher program. These are:

- Popular Capital Obligation Card (Yellow Card); "Rahvakapitali Obligatsioonide Arvestuskaart"
- Registration List of National Capital Voucher Accounting Cards; "Rahvakapitali Obligatsioonide Arvestuskaartide Registreerimisnimekiri"
- Additional Card; "Lisakaart"
- List of Card Issuers; "Arvestuskaarte Valjastavate allüksuste nimekiri."

Our assumption is that the Automated Voucher System database should initially be based upon this information. Additional data requirements will develop as other voucher types are proposed for inclusion in the Automated Voucher System, housing purchase requirements are implemented, and reports are defined. However, in the meantime, the Housing Voucher System will be composed of the data found in the above forms.

Section 3.0 Inputs

The primary inputs for the Housing Voucher Manager have been defined as:

- ☒ Popular Capital Obligation Card (Yellow Card); "Rahvakapitali Obligatsioonide Arvestuskaart"
- ☒ Additional Card; "Lisakaart"
- ☒ Registration List of National Capital Voucher Accounting Cards; "Rahvakapitali Obligatsioonide Arvestuskaartide Registreerimisnimekiri"
- ☒ List of Card Issuers; "Arvestuskaarte Valjastavate allüksuste nimekiri."

See Appendix F for samples of each input.

Popular Capital Obligation Card (Yellow Card)

The National Housing Board will distribute the voucher cards to local government offices (Maakonds). The local government offices will distribute the vouchers to the local housing offices for distribution to the individuals in each locality. Each individual who was a permanent resident of the Republic of Estonia on January 1, 1992 will receive a card. The individual will present his or her identification and the following information will be entered on the card:

- ⊖ Name
- ⊖ Date of Residence in Estonia
- ⊖ Sex
- ⊖ Year of Birth
- ⊖ Year of Death
- ⊖ Number of Children
- ⊖ Personal Registry Code Number.

After verification of this information, a card registration number is issued which uniquely identifies the individual's housing claim.

After registering the card, the individual collects information about his or her length of service in a variety of categories found on the card. This includes such things as length of time in the Soviet Army, years worked, period of time unemployed or in university, and years in jail or in exile. This information will be verified by the local housing office and a number of voucher years or points will be assigned. These voucher points are valued at one square meter of housing per point. These voucher points may be used to purchase housing at the rate of one square meter per point, given as a gift between parents, children, spouses, in-laws, and siblings, received as inheritance from a voucher holder who has died, or converted to Popular Capital Obligations. These Popular Capital Obligations may be traded in a secondary market at some later date.

Although the card maintains detail on the years and days in each category, the Housing Voucher Manager will maintain only summary balances of the individual's years.

The card also maintains information on transactions such as those mentioned above (i.e. gifts, inheritance, etc.) It is like a log showing who the other party in the transaction is, what kind of transaction is being executed, dates, and amount of transaction. Should the individual have too many transactions to fit on the Yellow Card, an Additional Card may be issued.

Additional Card

The Additional Card may be issued to collect additional transaction information. It contains the same information as that found on the back of the Yellow Card. This information concerns gifts of voucher years between individual accounts. It includes the following information:

- ⊕ Name
- ⊕ Card Registration Number
- ⊕ Other Individual's Name
- ⊕ Other Individual's Personal Code
- ⊕ Type of Transaction
- ⊕ Number of Voucher Points.

Registration List of National Capital Voucher Accounting Cards

This is a hard-copy register of Yellow Card applications made at the Local Housing Offices or Self-Government locations. The information it carries is primarily a synopsis of the individual's application for the Yellow Card. It includes such information as:

- ⊕ Card Registration Number
- ⊕ Personal Code
- ⊕ Name
- ⊕ Year of Birth
- ⊕ Year of Death
- ⊕ Sex
- ⊕ Number of Children
- ⊕ Year of Residence in Estonia
- ⊕ Card Issuing Date.

List of Card Issuers

This is a hard-copy list of those local housing offices or self-governing entities which have the authority to issue Yellow Cards. It includes the following information:

- ⊕ Number of Housing Office
- ⊕ Name of Housing Office
- ⊕ District
- ⊕ Address
- ⊕ Contact Person
- ⊕ Telephone

Section 4.0 Outputs

Requirements for outputs from the Housing Voucher System are still evolving. We expect that the SCC, the DSP, and the National Housing Board will be more able to define report requirements after the installation of the new government. However, in the meantime, we have defined several reports which meet general information needs for the short term and should help all interested parties to more clearly define their own information needs.

These reports are as follows:

- ☞ Form 1P
- ☞ Form 2aP
- ☞ Form 2P
- ☞ Voucher Totals Report
- ☞ Voucher Transactions Status Report.

Mock-ups of these reports are included in this section. It is not clear at this point how frequently these reports are required to be generated. However, we recommend that they be produced at least once a month.

Form 1P

This report is a reproduction of a manual register that is planned by the SCC. There are no known recipients of the report other than the SCC.

Form 2aP

This report is a reproduction of a manual register that is planned by the SCC. It is required to be produced for submission to a Notary Public.

Form 2P

This report is a reproduction of a manual register that is planned by the SCC. It could be usefully produced by automated local housing offices and county seats to accompany diskettes for submission to the central Housing Voucher Manager database.

Voucher Totals Report

This is a report designed by the Deloitte & Touche team to provide summary management information to the SCC, local offices, DSP, and National Housing Board. It could be produced each month to give the audience a sense for the progress of Housing Privatization. The report organizes information by the various Local Housing Offices according to District or County. It also anticipates the inclusion of Housing Purchase information which is planned for the beginning of 1993.

This report was designed by the Deloitte & Touche team as a management information tool for the SCC, local housing offices, DSP, and National Housing Board. It should give the users a sense for the progress of Housing Privatization and Purchases, current activity, and new totals. The totals should match the totals generated in the Voucher Totals Report.

Section 5.0

Processing Requirements

The National Housing Board will issue Popular Capital Vouchers (Yellow Cards) which will be distributed to counties across Estonia. The county completes Form 1P, the list of Offices Issuing Popular Capital Voucher Cards, and distributes the Yellow Cards to the Local Housing Offices. The SCC receives Form 1P from the counties and enters the data into the Housing Voucher Manager.

Each eligible individual goes to his or her Local Housing Office and presents identification, establishing identity. The Local Housing Office issues the card to the individual after recording application information on Forms 2aP and 2P. Form 2aP is sent on to a Notary Public while Form 2P is sent to a Local Self Government entity. This establishes the individual's account. The information collected includes name, personal identification code, date of residence in Estonia, sex, year of birth, number of children, and the registration number of the card issued. In those offices where the automated system exists, this information will be entered directly into the Housing Voucher Manager, establishing the individual's account. In those offices without PCs, the information will be sent to a local government office where it will be entered into the Housing Voucher Manager. Should no such office exist, the information will be sent to the SCC for input into the system.

The individual collects information required on the card from his or her employer and social welfare office. The information is presented to the Local Housing Office. Depending upon the availability of PCs, the information is either entered into the Housing Voucher Manager here, sent to the Local Self-Government, sent to the cognizant County, or passed on to the SCC. This establishes the individual's voucher point balance.

The individual is free to give and receive gifts of voucher points. These transactions are similarly recorded on the Yellow Card or Additional Card should the space on the Yellow Card be exhausted. This information is entered into the Housing Voucher Manager wherever automated equipment exists.

A State approved valuer examines the premises of the individual's housing and establishes a "value" for the residence which is represented in terms of square meters or voucher points. Once the value has been established, the individual may apply all required voucher points to the purchase of the residence, pay for some amount in cash, or pay for some amount in other securities to be defined by the State. Any residual balances of voucher points may be converted to Popular Capital Obligation Bonds which are still to be defined as well. These bonds are expected, though, to have some defined value and to be tradable in the secondary market.

The system design presented in this design meets these requirements. Where PCs are available, the Housing Voucher Manager will allow the user to enter the individual's application into the RO2NDIV. With the initial application, since the Card Registration is also assigned at this point, a RO2HOUSI record is also established. The contents of these

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two records may be forwarded to the central database residing at the SCC to establish the individual's account. Alternatively, either the county seat or the SCC can enter the individual's application into a copy of the system residing at either of those two points. As said, this application procedure establishes the individual's account and allows the authorities to begin tracking the progress of the individual's housing claim through the voucher privatization process.

After the individual collects information concerning his or her number of years in service according to the categories found on the Yellow Card, the system user at either the local housing office, county seat or SCC can retrieve the individual's record, verify the identity of the person and complete the application record. This will mean completing the R02HOUSI record and perhaps recording a number of gift transactions in R05TRANS. Should the individual have too many transactions for the Yellow Card and an Additional Card is required, the Housing Voucher Manager will allow the user to attach a R04ADDCA record to the individual's record. Finally, the user may also associate a R06CONVE record or R07AGVOU record with the individual's record should that be required.

Section 6.0

Other Considerations

A number of issues should be addressed as the Housing Voucher Manager is developed and as we consider the development of additional systems and interfaces. Most of these issues have been discussed previously with the SCC. We recommend that the SCC take this opportunity to begin making progress in addressing these issues.

Testing

Testing of the Housing Voucher Manager - and other products generated by the SCC - need to be thoroughly tested prior to implementation. Nothing hurts the credibility of a software producer as much as fielding a system that features embarrassing problems. All too often, testing is left to the programmers. However, programmers know their work too well to view it objectively. The software should, therefore, also be tested by individuals not familiar with the operation of the software.

The SCC should develop a plan for testing of the software and assign a few individuals to review the product as it is readied for implementation. These individuals should evaluate the extent to which the system functions correctly, prompts are simple and sensible, and expected results are produced. On the basis of this testing, the SCC should declare the software to be acceptable. A Deloitte & Touche representative should conduct testing at this point for final acceptance.

Implementation

Even with careful planning, implementation of software systems is a difficult process. The lack of certainty surrounding the implementation of the Housing Voucher Manager makes planning very important. The SCC should generate an implementation plan considering at least the following questions:

- o Which sites are automated and which are not?
- o For those automated sites, what equipment exists and is there sufficient capacity?
- o What is the expected volume of data expected from each site?
- o Who will install the software and verify correct operation?
- o What will be the schedule of automation?
- o Which sites will be implemented in which order and why?
- o Who will be responsible for the system's operation in each site?
- o How often will data be submitted to the SCC?
- o Who will correct errors identified during operation?
- o What procedures exist for error correction?

A Deloitte & Touche representative can assist the SCC in this process by reviewing any implementation plan generated by the SCC.

Training

The best guarantee that implementation of the system will be successful is a thoroughly trained user population. The SCC should develop a training plan and curriculum that will ensure effective and efficient training. Questions the SCC should consider include:

- o Who will be trained and by whom?
- o How will the classes be conducted?
- o How many days or hours should be allocated to training?
- o Where will training take place?
- o Should the SCC take all user questions in the future or should people be trained in each county to support the local housing offices? (This, of course, depends upon the extent to which a county is automated.)
- o Will a training database be created?
- o What materials will the SCC provide to the students during class to take away with them afterwards?
- o What User Documentation will the SCC produce?

A Deloitte & Touche representative can assist in this process by reviewing any materials generated by the SCC.

System Documentation

Although the Design Document provides much of the documentation found in a System Documentation manual, the SCC should keep this material up to date as the Housing Voucher Manager changes in the months ahead. In particular, the SCC should ensure that all programming specifications are kept up to date, all volume estimates are accurate, and that the text of this document accurately reflect the processing of Housing Vouchers. One individual in the SCC should be given the responsibility of ensuring that all information describing the Housing Voucher Manager in this Design Document be kept current.

Size of Housing Voucher Population

It is not clear at this point how many individuals will submit applications for housing voucher cards at which local housing offices. For these reasons, it is difficult to estimate which sites will require additional resources in terms of automation support (i.e. PCs) and data entry support. Obviously, low volume sites should be a lower priority than high volume sites when allocating automation equipment. Attention should be given at this point to the expected size of the application population by county and by local housing office. It may be possible to temporarily reallocate equipment to record as many applications as possible during the early stages of housing privatization. Otherwise, serious consideration should be given to the number of individuals that may be required to perform data entry in other sites such as the SCC.

For those sites supported by automated equipment, the volume question extends to such matters as how much disk storage is required at any given site and how many diskettes a particular housing office requires to submit its data to the SCC.

Assume, for example, a housing office handling 10,000 applications. Given the size estimates shown in Appendix D, a total of 4 MB would have to be transferred from the housing office to the SCC. This would require 3 high-density 3.25 inch diskettes per submission, assuming complete replacement of a housing office's portfolio in the SCC database. Obviously, this also assumes the presence of a high-density 3.25 inch drive in the housing office computer.

Therefore, it makes sense that the SCC spend time at this point to get a sense for where people will make applications and how many of these applications there will be.

Housing Purchase Module

Work is underway at this point on the design of a Housing Purchase Module. However, it is not clear how much information should be included in the Module. The SCC and the National Housing Board have quite different needs for Housing Purchase information. A key question to be considered before work progresses too far is whether the SCC will undertake to meet the National Housing Board's need for Housing Purchase information or leave that to the National Statistics Bureau.

Deloitte & Touche recommends that the National Housing Board's need for Housing Purchase information be satisfied through the **Housing Voucher Manager**.

Information Use

At this point, there is no clear user of information generated by the Housing Voucher Manager other than the SCC. There are certainly potential users of the system. The National Housing Board is a good potential user of information generated by the Housing Voucher Manager. The National Housing Board is inclined at this point to accept information from the State Statistics Bureau on a bi-annual basis, but could easily become a user of the Housing Voucher Manager given the opportunity to do so. Once the Voucher Totals Report and Voucher Transactions Status Report are completed and generating useful information, copies should be provided to the National Housing Board for comment. The SCC could then undertake to create other reports of interest to the National Housing Board. By providing consistent information of high quality on a regular and as-needed basis, the SCC could easily become the preferred provider of Housing Privatization data.

Although not so clearly one, the DSP is a user of Housing Privatization information. As the organ of State responsible for small and medium privatization, the DSP may be required to possess and manage information about the status and progress of Housing Privatization in Estonia. The SCC could provide an effective supporting role to the DSP in this way.

Finally, Housing Privatization is an issue of some interest to members of the Parliament. It makes sense for the SCC to identify those members with the greatest positive interest in the process of Housing Privatization and undertake to meet their information needs.

We recommend that the SCC begin expanding its contacts with the National Housing Board, the DSP, and members of Parliament to:

- ① To gauge the current level of interest in information from the Housing Voucher Manager
- ② To increase that level of interest by educating interested parties
- ③ To obtain comments to improve Housing Voucher Manager products
- ④ To expand the audience for Housing Voucher Manager products.

Interfaces

There are two obvious candidates for interface with the Housing Voucher Manager. The first is the National Registry. Several individuals with whom we spoke during requirements assessment and design expressed doubts about the integrity of the National Registry. Much of the material, they said, was old and not dependable. The Housing Voucher Manager will maintain the latest information, albeit limited, concerning citizens of Estonia. It is possible to establish an interface that would enable the Housing Voucher Manager to update certain fields in the National Registry

At the same time, the National Registry offers an opportunity for error checking and preventing fraudulent applications from being processed in the Housing Voucher Manager. If, for example, the National Registry and Housing Voucher Manager have the same personal code for an individual, all parties could conclude that both databases are correct for this record. If they are different, either the National Registry is incorrect or the Housing Manager is incorrect or both. This discrepancy provides an opportunity to verify the data submitted to the Local Housing Office.

We recommend that the SCC take the initial step of comparing data stored in the Housing Voucher Manager with that stored in the National Registry, and to explore with the managers of the National Registry ways to share information should that be possible.

The second system providing a possible interface opportunity for the Housing Voucher Manager is the Housing Register. Since the Housing Voucher Manager will include purchases at some point, it makes very good sense to use the resources of the Housing Register to develop the best statistics about Housing Privatization.

We recommend that the SCC keep the National Housing Board informed of all major developments with the Housing Voucher Manager, and submit copies of reports generated by the system for the Board's review, comment, and use. We also recommend that the SCC work with the National Housing Board to explore the prospects for interface with the Housing Register.



10 November, 1992

Gustavo A. Vega
Deloitte & Touche
1001 Pennsylvania Ave., NW
Washington DC 20004-2505

Teie

CC: Adrian de Graffenreid (USAID)

Meie 10. november, 1992. m.t-6/151

Dear Mr. Vega:

The Estonian State Computing Centre's main tasks are concerned with developing and maintaining National central registers, information bases and information processing systems. In particular, we are responsible for registers needed for reform and privatization, such as the National legal register, the National register of restitution claims, and the Automated Voucher System.

In this situation, it is very important to have all our automatic data processing (ADP) activities under a formal control system, and to use modern methodology and tools for developing the National information systems mentioned above. Such methodology and tools were not easily available in the past, neither to us nor to the other Estonian ADP companies. We therefore ask your help in training the personnel of the Estonian State Computing Center in the methods and tools we need.

Internationally, the following means are used for tasks such as ours:

- project management (for example, Microsoft Project for Windows)
- computer aided system engineering (for example, Knowledge Ware Application Development Workbench)
- methodology for developing information systems (for example, James Martin Information Engineering Methodology, or Deloitte & Touche's 4Front)

Introducing the above-mentioned means to Estonia should be performed with both classroom training and in the form of using them in some real ADP project; that is, a "pilot project".

The opinion of Estonian ADP specialists is that using USAID resources for the purposes described above will enable us to economize money in all future Estonian ADP projects. And it will allow us to develop projects better and more quickly.

Best regards,
Raivo Kasemaa
General Manager