AGENCY FOR HOUSING MORTGAGE LENDING BUSINESS PREPARATION

FINAL REPORT

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ABSTRACT

The attached is a final report for Task Order FAN 218-02 - *Agency for Housing Mortgage Lending Business Plan*. The task order covered work by Systems and Credit from Fannie Mae, with staff from the Institute for Urban Economics.

The advisors prepared the first two phases of a systems plan for the Agency. The first phase focused on the automation targets, timeframes and requirements. The second phase compared software and vendors for their capability and experience. This was followed by the implementation requirements, including milestone analysis, business process and technical architectures.

Two other advisors prepared several drafts of business guidelines for the Agency, the fourth of which is included here. There is also a discussion of lender eligibility issues with suggestions on the evaluation of lenders applying to participate in the program.

EXECUTIVE SUMMARY

In the summer of 1997, several specialists from Fannie Mae worked with the staff of the Agency for Housing Mortgage Lending in Moscow. These included a Credit Advisor, Operations Advisor, and Systems Advisors.

Of great importance to the Agency's ability to do business, is the preparation of its guidelines. The Credit Advisor, assisted by the Operations Advisor, prepared a first draft of the guidelines, incorporating work on underwriting and servicing standards prepared previously by the Institute for Urban Economics. This draft has been revised and refined several times, and the fourth version is included in this report. A memo addressing outstanding issues on lender eligibility follows the guidelines, and provides some suggestions for the resolution of the issues.

Work on the technological side of the agency was begun by the Systems Advisors. The first effort focused on a draft of a systems plan, including automation targets, timeframes, and requirements. A summary of the information obtained during meetings with vendors and a large bank in Moscow is included in the report. A second systems advisor followed this preparation with the implementation requirements, based on the Agency's business needs. The advisor also met with several vendors in Moscow and provided the Agency staff with an assessment of the capability of software available in the U.S. that would be appropriate.

RUSSIAN FEDERATION FOR HOUSING MORTGAGE FINANCE

MORTGAGE LENDING GUIDE

INTRODUCTION

The purpose of the Mortgage Lending Guide ("Guide"),[1] is to document in greater detail the contractual relationship between the Russian Federation Agency for Housing Mortgage Finance ("Agency") and its Participating Banks ("Banks" or "Bank"), as agreed to in the Mortgage Selling and Servicing Agreement ("Agreement"). This Guide also provides standards for sound mortgage underwriting and loan servicing practices for use by Banks doing business with the Agency.

The Guide is an integral part of the Mortgage Selling and Servicing Agreement executed by the parties and the requirements set out herein are part of that contractual obligation. The requirements of the Guide may be amended or superseded by specific waivers included in the Agreement or in any Master Commitment Agreement, ("Master Commitment") subsequently executed.

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[1] *Note:* This document is a work in progress. Chapters 5 and 8 were drafted by Ms. Maggiano and Mr. Dave, and have not yet b ewed by the Russian Team. Chapters 2 and 7 will undergo revision. Chapters 1, 3, 4 and 6 are considered complete with the exception policy related questions highlighted in bold italics.

RUSSIAN FEDERATION FOR HOUSING MORTGAGE LENDING FINANCE

MORTGAGE LENDING GUIDE

1. CONTRACTUAL RELATIONSHIP

Upon execution of the Mortgage Selling and Servicing Agreement, the Bank establishes the terms and conditions of its contractual relationship with the Agency. The continuation of that relationship depends upon both parties honoring the mutual promises contained in that and future Agreements and on the Bank satisfying the requirements contained in the Guide.

1.1 Warranties

The Agreement and Guide list specific warranties the Bank makes to the Agency. These warranties are not limited to matters that the Bank had knowledge of at the time of signing.

The Bank warrants that all loans delivered under this Agreement meet applicable requirements of the Guide. Warranties apply until all loans delivered under the terms of this agreement are paid in full.

The Bank's breach of a specific warranty entitles the Agency to the applicable rights and remedies for that breach. Rights and remedies may be exercised separately for each breach of a specific warranty, concurrently or successively with the exercise of any other rights and remedies described herein or allowed by law.

The Bank must indemnify and hold the Agency (and its successors and assigns) harmless against all losses, damages, judgments, and legal fees based on, or resulting from, a breach of the Bank's warranties or representations. If a warranty made by the Bank is untrue, the Bank may be required to buy back the mortgage that was collateral for the purchase by the Agency.

1.2 Interest to Be Purchased

It is the intent of the Agency that acceptable mortgages will serve as collateral for funds advanced by the Agency. In the transaction the Bank agrees to sell credit agreements secured by mortgage notes it originates In the transaction, the Bank shall sell to the agency its rights under credit agreements which it originates, including the rights of collateral and the rights to cash flow. Such sales shall be accomplished by endorsement and delivery of the credit agreement to the Agency as well as assignment of the mortgage in a form which meets appropriate legal requirements to convey title to the Agency.

1.2.1 Remittance of Scheduled Payments. The Bank agrees to remit to the Agency all payments on a "Scheduled/Scheduled" basis, that is, the Bank will remit all payments due to the Agency on the agreed upon due date, even if such payments have not been received from the Borrower. The Bank's responsibility to advance funds for delinquent payments will end at repurchase of the delinquent loan, at which time the interest due will be prorated to the repurchase date.

1.2.2 Recourse Provision. The Bank warrants that it will indemnify the Agency against loss by agreeing to repurchase any loan whose payments are delinquent 90 or more days from the due date of the last paid installment

1.3 Basic Duties and Responsibilities

The Bank performs its origination and servicing functions under the Agreement as an independent contractor, not as an agent or representative of the Agency. The Bank is obligated to use sound business judgment in all aspects of its operations; to ensure that it has adequate staff and facilities to originate and service quality mortgage loans; to protect against fraud, misrepresentation, or negligence by any party and to provide Borrowers with assistance when required.

1.3.1 Written Procedures. To assure that its staff is knowledgeable, the Bank must have documented, written procedures for all aspects of mortgage lending and servicing. The Bank must update the procedures as the needs of its business change. The Agency has the right to request copies of the procedures.

1.3.2 Internal Quality Control. The Bank is required to maintain an effective quality control system to verify the existence and accuracy of legal and credit documents; the quality of appraisals; underwriting decisions and their compliance with Guide requirements, and the effectiveness of the overall servicing effort. The quality control plan must be written and available for inspection by the Agency.

1.3.3 Compliance with Applicable Laws. The Bank is responsible for being in compliance with all applicable local and national laws and regulations that apply to its business practice. The Bank must ensure that the properties securing collateralized mortgages comply with local housing laws or other applicable regulations.

1.3.4 Conflict of Interest. All employees, officers, Members of Supervisory or Management Boards of the Agency who are affiliated in any way with mortgage lending or servicing, must not participate or promote any transaction, policy or decision in which they have any personal or financial interest. The term "personal interest" extends to the interests of relatives, friends and business associates.

If a situation arises where there is a personal or material financial interest in any matter or decision coming before the Bank or the Agency, that individual must abide by the financial determination of the Agency.

1.3.5 Agency's Right to Review Bank Operations. The Agency will re-certify participating Banks annually as described in Chapter 2. The Bank agrees to make financial information and certifications as required by the Agency. Additionally, as part of its on going Quality Control program, the Agency will review the operations, written policies, staffing levels, loan files and other aspects of Bank operations as are relevant to origination and servicing of loans delivered to the Agency. The Bank agrees to make staff and files available upon reasonable notice for on-site visits by Agency staff.

1.4 Use of Agency Approved Index(s)

The Bank must certify that it has made all payment changes in accordance with the dates and financial index(s) currently approved by the Agency.

1.5 Warranty Violations

The Agency will, from time to time, review the operations of the Bank to ensure that the Bank is in compliance with the terms set forth in the guide. Failure of the Bank to meet these requirements shall be grounds for one or more of the sanctions listed below.

1.5.1 Repurchase. The Agency will periodically review a percentage of the mortgage loans to ensure that they meet all eligibility criteria and underwriting standards. If this review discloses that a mortgage did not meet these standards the Bank will be required to either correct the violation or repurchase the mortgage. The fact that a mortgage has passed this quality control review does not limit the Agency's rights if a violation is discovered later.

1.5.2 Penalties and Fees. If the Bank is not satisfactorily fulfilling its requirements or fails to comply with the Agreement or the Guide, the Bank will be in breach of the Agreement. The Agency may impose fees for non-compliance in accordance with a public schedule of fees.

1.5.3 Suspension and Termination. A Bank's right to deliver loans to the Agency may be temporarily suspended pending resolution of the violations which caused the suspension. In this case the Bank will be given specific actions which must be taken before the suspension can be lifted. A Bank may also be terminated as a Participating Bank following suspension or without suspension.

1.5.4 Notice and Appeal. In all cases of Suspension or Termination the Bank will be given written notice of the specific infractions which caused the action. The Bank will have five business___ days from receipt of the notice in which to request a meeting to appeal the decision of the Agency. The Agency will have five business ___ days following the appeal to make a final determination of the issue. The decision of the Agency following the appeal will be binding on both parties.

1.6 Amendments to the Guide

The Agency reserves the right to alter or waive any of the requirements and to rescind or amend any material set forth in this Guide. Announcements of important updates or changes will be communicated via Mortgagee Letters mailed to all Participating Banks. Upon receipt, the provisions of the Mortgagee Letters become binding on Banks and have the full force and effect of provisions of the Guide. Occasionally, letters may be sent to individual Banks to provide special instructions recognizing and informing them of geographical or other differences in legal requirements or market conditions. Mortgagee Letters sent to individual Banks are binding on the recipients.

1.7 Notices

The legal address for delivery of official notices to the Agency is listed below, though sections of the Guide may specify different addresses for other purposes.

Name:
Title:
Address:
Phone Number(s):

2. BANK ELIGIBILITY REQUIREMENTS

To become a Participating Bank, a Bank must meet minimum qualifications established by the Agency and agree to provide the Agency on an on-going basis with financial information and access to documents and information relevant to the Bank/Agency relationship. The Agency reserves the right to change the eligibility criteria at its sole discretion.

2.1 Financial Soundness Criteria

The Agency requires that the Bank meet minimum financial criteria to ensure that the Bank is financially capable of fulfilling its obligations under the Agreement. To meet the financial soundness criteria the Bank must:

- Hold a valid Banking License issued by the Central Bank
- Execute an “Authorization of Verification of Financial and Business Information”
- Other criteria - To Be Developed

2.2 Lending Experience and Trained Staff

The Bank must demonstrate the ability to originate and service the types of mortgages available under the Agency program. Minimum experience requirements include:

Minimum of two years of successful retail lending experience.

Minimum of six months of mortgage housing lending experience during which time ten or more housing loans were originated and closed.

Staff assigned to origination, servicing, accounting and remittance of Agency loans must have a minimum of two years of general banking experience.

At least two members of the Bank staff must have completed a formal course in housing mortgage lending approved by the Agency. In the event the Bank has only one employee who has completed mortgage training, the Bank may request conditional approval by agreeing to obtain training for additional staff within six months from the date of the Agreement.

2.3 Written Policies and Procedures

The Bank will maintain written policies and procedures for staff and management describing all processes which impact loan sales to the Agency. Of special concern are procedures involving:

Quality control and management systems to evaluate and monitor overall quality of the mortgage origination, servicing and loan accounting processes.

Escrow administration procedures to ensure that tax and insurance escrows are calculated, collected and remitted accurately and timely.

Default servicing policies and reports designed to identify and effectively manage loan defaults to prevent and interruption of the Agencies cash flow.

Reporting and Remitting processes which guarantee the accuracy of the amounts remitted to the Agency.

If the Bank has not yet developed written procedures for all housing mortgages related processes, the Bank may request conditional approval subject to development of a complete set of procedures within six months from the date of the Agreement.

2.4 Fidelity Bond

Effective in (state year) the Agency will require all participating Banks to post a fidelity bond in an amount to be determined which will protect the Agency and its investors against acts of fraud by individual officers or staff of the Bank. The Agency is currently researching sources to make the bond requirement accessible and affordable to Banks.

2.5 Application Package

Banks interested in obtaining approval and becoming a participating Bank must complete the appropriate application forms and have an authorized representative of the Bank sign the application of behalf of the Bank. The Bank must include the following with the application:

2.5.1 General

A narrative describing the general scope and history of the Bank's operations.

A list of principal officer's names, titles and areas of responsibility.

A lists of ownership interests, identifying holders of a 10 percent or greater interest in the Bank.

A business plan detailing the Bank's future commitment to mortgage housing lending.

A letter signed by an authorized representative of the Bank accepting the contractual relationship terms contained in the Draft Agreement which accompanied the Application.

The application fee payable to the Agency to cover actual costs of processing.

2.5.2 Financial

The "Authorization for Verification of Financial and Business Information" signed by an authorized representative of the Bank.

Copies of the most recent annual report made to the Central Bank.

Year-end financial statements for the most recent two years, certified by an independent public accountant including all attachments and supporting notes.

Balance sheet certified by tax inspection.

Mandatory economic normatives.

Breakdown of certain balance and no-balance accounts (debtors and creditors, guarantee and sureties).

Loan portfolio analysis with a breakdown according to terms, sectors of economy, and collateral type.

Net outstanding debt under loan, including total overdue debt obligations.

Equity flow.

2.5.3 Experience

Resumes of managers and staff who will be directly responsible for underwriting, servicing and accounting for loans sold to the Agency.

Evidence of completion of approved mortgage lending training by Bank staff.

At least two sample mortgage loan files originated and serviced by the Bank. Loans the Bank expects to sell to the Agency are preferred.

2.5.4 Policy and Procedures. The Bank will provide a copy of its written policies and procedures for all housing mortgage lending related processes. If the Bank has not yet developed written policies and procedures, the Bank will submit a short narrative description of the procedure for underwriting and servicing of mortgage loans.

2.6 Confidentiality

The Agency will execute a confidentiality agreement limiting distribution of the Bank's proprietary information to authorized Agency employees only.

2.7 Annual Recertification

The Agency will recertify each Bank annually. The Bank must submit annual documentation of the Bank's financial position for review by the Agency. The financial information must be submitted to the Agency by _____________ of each year. There may be a penalty for late submission. Failure to provide the information could lead to suspension of the Bank's right to deliver mortgages to the Agency. The financial information must include:

- Copies of the most recent annual report made to the Central Bank
- Year end financial statements for the most recent two years, certified by an independent public accountant including all attachments and supporting notes
- Balance sheet certified by tax inspection
- Mandatory economic normatives
- Breakdown of certain balance and no-balance accounts (debtors and creditors, guarantee and sureties)
- Loan portfolio analysis with a breakdown according to terms, sectors of economy, and collateral type
- Net outstanding debt under loan, including total overdue debt obligations.
- Equity flow
- Report on loans sold to the Agency

3. ACCEPTABLE MORTGAGES

General requirements for housing mortgage loans acceptable for sale to the Agency are detailed below. However, the Agency reserves the right to negotiate specific loan terms and programs with individual Participating Banks. The Agency will identify in the Master Commitment the types of mortgages it will accept from the Bank as collateral during the term of the Agreement.

3.1 Type

The Agency will purchase only first lien mortgages that are either:

- Variable rate ruble denominated loans indexed to the GKO or other index that the Agency elects from time to time.
- Variable rate dollar denominated loans
- Fixed rate dollar loans

3.2 Purpose

The Agency will purchase income from loans originated for any of the following purposes:

Purchase of a newly constructed single family cottage, cottage for two or several families or a of a unit in a multi-family building,. The Agency's purchase commitment will be subject to completion of construction and restructuring of the loan into a permanent mortgage.

Purchase of pre-existing housing in a multi-family building.

Purchase of pre-existing single-family cottages, cottages for two or several families with documented ownership or lease rights to the plot (the lease must be at least two years longer than the loan term) (Are you financing the long term lease or sale?)

Purchase of seasonal housing, dachas, garden cottages used as second homes (Is this a greater risk?)

3.3 Borrowers

Borrowers must be natural persons, citizens of the Russian Federation and over the age of eighteen.

3.4 Down Payment Requirement

The amount of the down payment must be no less than 30 percent of the appraised value or the sales price of the property, whichever is less. The source of the down payment should be from the Borrower's own funds whenever possible. However, at the discretion of the Bank the, and if the Borrower meets all other underwriting requirements, the Borrower may use other "acceptable funds" as defined in Section 4.8.2 of the Guide., for up to _____ percent of the down payment.

3.5 Loan Amounts

The maximum amount of a loan acceptable for delivery to the Agency may not exceed the equivalent of 70,000 U.S. Dollars. The minimum loan acceptable for delivery to the Agency must not be less than 5,000 U.S. Dollars. The loan amount should be proportionate to the value of the real estate so that claims under the loan are not considered insignificant in comparison with the collateral. (Should there be a minimum LTV established to further quantify this provision?)

3.6 Term

The Agency will accept delivery of mortgages with terms of two to ten years.

3.7 Collateral

All loans must be secured by a pledge of real estate executed as a first mortgage and free of other encumbrances. The real estate used as collateral for the mortgage loans must be located within the Territory of the Russian Federation and must be registered as owned by the Borrower (or Co-Borrowers) prior to delivery to the Agency. Properties without documented ownership are not acceptable.

3.8 Other Terms and Requirements

Mortgages may be assumable with full qualification of the new Borrower.

There will be no penalty for early payoff, however there is a 30 day notice requirement.

The due date for all loan payments is the first day of the next month.

In case the period from the date of granting of the loan to the date of payment is 15 calendar days or less, the first payment includes only interest for the actual period of loan use.

In case of delinquency, the Bank will charge a late penalty equal to 0.2 percent of the amount of the delinquent payment for each day of delay.

Subsequent mortgage of the collateral real estate is not permissible.

Documented evidence of paid property tax must be provided as part of the mortgage agreement.

The Bank is required to maintain escrow accounts for payment of property taxes, hazard, life and disability insurance during the term of the loan as more fully described in Section 6.9.

4. UNDERWRITING STANDARDS AND REQUIREMENTS

Underwriting, defined as loan repayment probability assessment, involves review and analysis of the repayment capacity, credit history, and available capital of a potential Borrower, as well as a review of the value and condition of the collateral property. The underwriter follows the assessment with an approval or rejection of the application and documentation of the decision. Origination involves drafting loan documentation, and funding the loan.

This Chapter details the Agency's underwriting standards and its minimum requirements for underwriting. For purposes of this Guide all references to the Borrower also include all Co-Borrowers if any.

4.1 Underwriting Standards

Underwriting of the Borrower involves an analysis of three elements of credit worthiness:

> **Capacity.** The ability to repay the loan given the Borrower's income and expenses.
>
> **Credit History.** The Borrower's demonstrated willingness to meet his or her financial commitments.
>
> **Capital.** The amount of money the Borrower has to apply to the down payment and other costs of the transaction.

Underwriting the collateral property includes a determination of the value of the property in relation to the amount of the loan requested, and an assessment of the physical condition of the real estate.

4.2 Pre-Qualification

Prior to accepting a formal loan application the Bank may choose to evaluate the Borrower's ability to qualify for the loan by gathering income and expense information from the Borrower and calculating income to housing and income to debt ratios as described in 4.7. The Bank should inform the customer that pre-qualification does not imply that a loan application will be approved as other factors influence the decision including verification of the information received. Banks may use the standard form for Preliminary Verification of Borrower's Financial Standing, Form ___, though use of this form is not mandatory.

4.3 Loan Application

The Bank will collect detailed financial information from the potential Borrower using the Housing Mortgage Loan Application, Form ___, approved by the Agency.

4.4 Verifications

The underwriter verifies the accuracy of the income and expense, asset and credit history provided by the buyer, by sending Request for Information, Forms ___, ___, and ___ (verifications) to employers, Banks, tax inspectors, housing authorities and other creditors of the Borrower. Verifications must not be delivered by, or returned to the Bank by the Borrower and must be signed by an official of the company or office to whom they are addressed.

4.5 Evaluation of Borrower's Capacity to Pay

A key element in the underwriting process is determination of the Borrower's ability to make regular and timely payments on the loan from available income. For such analysis, the Bank's underwriter reviews the information collected on income and expenses, to determine if the Borrower has monthly net income sufficient to repay the loan.

4.5.1 Employment Stability. Stability of Borrower's employment at the time of application, as well as prospects for the future is a most important indicator of Borrower's ability to repay. Criteria used by the Bank to define potential Borrower employment stability includes:

Uninterrupted record for the past two years. The Borrower should explain any employment gaps longer than one month. Borrowers with an employment history of less than two years who have been engaged in military service or academic course work should provide either discharge papers or diploma.

Frequent change of jobs in the past two years. Reasons for frequent change of employment should be investigated, paying attention to the following: The employment change:

- Was at the Borrower's own discretion or because of discharge
- Was for reasons beyond the Borrower's control related to liquidation or restructuring of the company
- Involved the same line of work or different professional spheres
- Was accompanied by educational or professional advancement
- Resulted in higher or lower salary
- Resulted in career advancement of the Borrower

Education level, professional experience, qualification, employment in a stable and potentially profitable market segment. Analysis of the above factors will help the underwriter assess the stability of Borrower's employment, potential for professional and career advancement, and ability to find a new job without loss in income.

4.5.2 Factors Affecting Employment Analysis

Negative comments received from an employer could be a reason to decline an application but only after a detailed investigation of the comments.

Stable employment in the same line of work or profession for two years is a positive factor; however, because of the socio-economic changes in the country many potentially reliable Borrowers were forced to change jobs and profession frequently. This factor should not be an automatic reason to decline an application. The underwriter should evaluate the Borrower's employment history to determine the probability of continuance of employment. This presumes analysis of employer company or the Borrower's business (in case of self-employment) to assess the prospects for the future. Detailed study of newly created companies is necessary to determine their long-term viability.

Applicants who are in a line of work in which advancement is possible because of high demand for respective services and who have demonstrated the ability to work full time should be considered favorably.

Special attention should be paid to verification of employment stability of young specialists who have just started their professional career. Favorable consideration should be given to an Borrower who can be expected to receive adequate future income in view of his educational, and professional background.

4.5.3 Sources of Income. Calculations of the maximum loan amount a Borrower is eligible for may include only stable, documented income. The Borrower must be able to provide evidence through verification, or payroll documents of receipt of stable income for a period of not less than 12 months. The Bank must be able to reasonably expect that the income will continue to be received for the term of the loan or 4 years whichever is sooner. Analysis of the Co-Borrower's income is made using the same procedure. Acceptable sources of income include:

- Primary employment
- Qualified non-cash employment benefits
- Hourly wage
- Average annual overtime income
- Part-time or second job income
- Annualized bonus income
- Commission income
- Dividend and interest income
- Retirement income
- Net rental income
- Pension income
- Alimony and child support
- Anticipated income increases

4.5.4 Income Calculations. The amount of income at the time of application should be used to qualify the Borrower.

Yearly salary income should be divided by 12 to obtain a monthly figure.

The value of qualified non-cash employment benefits including rent subsidies, insurance benefits, and interest spread on low interest rates loans, may be included in the income calculation if there is a written employment agreement that indicates that the benefits are reasonably expected to continue for at least two years following loan origination.

An hourly wage should be calculated based on the total income earned in the preceding year divided by 52 weeks and further divided by the average number of hours worked per week. If this rate differs significantly from the current hourly rate reported by the Borrower, the underwriter should investigate the difference and determine the reason for the discrepancy. The underwriter may utilize the rate for the prior year, or the hourly wage at the time of application based on which best represents future earnings. The rate selected should be multiplied by the average amount of hours worked per week, indicated on the Verification of Employment, multiplied by 52 weeks, and divided by 12 to obtain a monthly income figure.

Overtime income can be used to verify that the Borrower meets qualification requirements if the employer confirms that the Borrower has received it for the past full year and it is likely to continue. Verification of Borrower’s income uses an average monthly overtime income the Borrower received during the entire past year. To calculate this, average hours worked overtime in a week is multiplied by hourly wage for overtime effective at the time of application. The result is multiplied by 52 and divided by 12 to obtain the average monthly overtime income.

Part-time or second job income may be used if it can be verified, has been uninterrupted for the previous year, and is likely to continue.

Bonuses may be taken into consideration in verification of Borrower’s paying capacity if the employer confirms that the Borrower has received it for the past full year and it is likely to continue. The underwriter should use an average of the Borrower’s bonus income per month over the past two years.

Commission income amounts may vary from year to year. The underwriter should, whenever possible, calculate an average figure for the past 12 to 18 months to establish the earnings trend. Acceptable commission income remains level or is increasing. If earnings are declining, there should be strong compensating factors in order to consider using commission income.

Dividend and interest income may be used if it can be documented with indication of source (shares, securities, time deposits) and the procedure and terms of payment.

Retirement and/or pension income may be used if it can be verified and the Bank can make a reasonable estimate on how long it will be received.

Net Rental Income may be considered only if the Borrower can provide a legally executed lease agreement to document that rental income will continue for at least two years. Reasonable rental expenses (i.e., mortgage payments, taxes, operation expenses, etc.) must be subtracted from the gross rental income and the net amount only may be considered

Alimony and Child Support may be considered as income if the Borrower has received such payments for at least a year and is legally entitled to receive them for at least two years in the future.

Anticipated Income Increases may only be considered if the employer indicates that the Borrower will receive a raise in salary or hourly wage, and the increase will go into effect prior to loan closing. Otherwise, the projected increase may be considered as a positive compensating factor.

4.5.5 Income of Self-Employed Borrowers. Self-employed Borrowers are defined as those who own not less than 25 percent of a business. A minimum of 2 years of self-employment in the same business should be required. The self-employed Borrower must demonstrate that the business is viable for the long term and can continue to generate income adequate to repay the mortgage loan. Self-employed Borrowers with insufficient self-employment history or weak documentation of stable and continuous income may strengthen their application with compensating balances such as a bigger down payment, statement of high value of the property minus obligations, higher reserves or a guarantor.

The self-employed Borrower must submit:

Two years tax returns

Financial statements for the previous 12 months and the current year

A profit and loss statement and balance sheet with note of the tax inspection.

The Borrower should also provide a Borrower Income Report, Form ____ as one of the documents attached to the mortgage loan application.

Financial statements should be analyzed to determine the source and the amount of the self-employment income. If assets of the business have been sold to generate one-time income, these amounts should be deducted when calculating the qualifying income. The underwriter may choose to have a security service perform an investigation of the Borrower's business to verify long-term viability of the business and the accuracy of financial statements. The income trend of the Borrower's business should be analyzed. Level or rising income should be given favorable consideration. Declining income should be noted and thoroughly examined.

4.6 Analysis of Borrower's Expenses

The Borrower's expense may be grouped into the following basic blocks:

Monthly expenses on existing housing in connection with rent, possession, maintenance and payment of utility fees

Future monthly expenses in connection with purchased housing (property taxes, insurance, technical maintenance fees, mortgage payments, other possible regular collections and payments related to use of housing)

Regular payments related to basic subsistence of Borrower and his family (food, education, health care)

Other regular expenses

Analysis of Borrower's regular expenses from the viewpoint of both amount and share in the overall expense structure, periodicity and priority will give the underwriter an understanding of the Borrower's ability to bear the burden of mortgage payments.

4.7 Ratios Used in Analyzing Borrower's Capacity

The underwriter will consider a Borrower's income based on two standards, income in relation to the Borrower's housing expense and income in relation to the Borrower's total monthly obligations. The Agency sets maximum percentages for each of these ratios. The Bank must insure the loans which collateralize Agency credits were underwritten in compliance with these ratios.

4.7.1 Housing Expense to Aggregate Income Ratio. The Agency expects the Borrower's housing expense will not exceed 40 percent of aggregate income. The calculation for this ratio is as follows:

PTI_1 - the ratio of monthly housing expenses, listed in Art. V. of the Mortgage Loan Application:

- Monthly principal and interest payment on the loan
- Monthly payments on property taxes
- Monthly insurance premiums
- Monthly technical maintenance expense

Divided by the aggregate monthly income of the Borrower and Co-borrower (“total” in the paragraph for monthly income in Art. V of the Application).

$$PTI_1 = \frac{\text{“total” monthly housing expenses (Art.V)}}{\text{“total” monthly aggregate income (Art.V)}}$$

This coefficient represents the maximum share of housing expenses in the Borrower’s budget defined on the basis of criteria established by the Bank or an entity interested in purchasing the loan. Higher ratios indicate an enhanced risk for the housing mortgage loan in terms of Borrower’s ability to repay it in a proper and timely manner.

4.7.2 Total Obligations to Income Ratio. The Agency expects the Borrower’s total monthly obligations will not exceed 50 percent of aggregate income. The calculation for this ratio is as follows:

PTI_2 - the ratio of total obligations (“total” in Art.V of Mortgage Loan Application in the section for monthly housing expenses + “total” in Art.VII of the Application) to income for the respective period. (“total” in Art.V of Mortgage Loan Application in the section for monthly income).

$$PTI_2 = \frac{\text{“total” in Art.V of the housing expenses section + “total” in Art.VII}}{\text{“total” of monthly income section (Art.V)}}$$

The ratio defines maximum permissible share of total obligations in the Borrower’s income, including all expenses either directly related to housing or arising under other obligations (consumer loans, other debts, alimony or other regular assessments).

4.8 Evaluation of Borrower's Capital

Borrower's assets in the form of monetary savings and deposits, movable and immovable property, jewelry, articles of art and other valuables are an important factor in determining his ability to repay the loan. The value of assets is not included into the gross income when its is calculated to define the maximum loan amount, but may serve as an indicator of the Borrower's wealth and a positive compensating factor.

The underwriter should define the amount of cash the potential Borrower must have to be eligible for a loan. (Required cash = down payment + loan fees + sale transaction costs).

4.8.1 Minimum Borrower Contribution. Whenever possible it is desirable for all of the required cash to be from the Borrower's own funds, either from savings or from proceeds of the sale of a prior residence. However, there will be instances in which Borrower's must rely on other sources of funds to accumulate the required down payment and costs. The Agency requires that the Borrower contribute no less than ___ percent of the capital needed to close the transaction from his personal funds as verified by the Bank. Other funds must come from one or more of the approved sources listed below.

4.8.2 Approved Sources of Funds. The following sources of funds may be used for the required cash to close the loan transaction:

Borrower's savings

Borrower's equity in real property being sold. The sale must be scheduled to close prior to the subject loan.

Other assets of substantial value the Borrower is liquidating. The Borrower must produce and agreement for sale of the assets or other proof of liquidity.

Gifts from family members if documented by a gift letter indicating that the gift will not be repaid.

Gifts or grants from churches, non-profit agencies if documented by a gift letter indicating that the gift will not be repaid.

Gifts or grants from employers as part of a structured employee assistance program in which the grant does not require repayment, or repayment does not begin until after the first mortgage is satisfied.

Government housing subsidies

No others sources of cash will be acceptable.

4.8.3 Verification of Deposits. The Bank must verify the source of all funds used by the Borrower in connection with the mortgage loan. If the Borrower keeps his money in a Bank, the underwriter should examine the balance for the current year and average balance in the account for the last two months. If a substantial deposit has been made in the last two months, the underwriter should check that the funds are not borrowed. Substantial deposit is that exceeding the income typically received for a given payment period, e.g., a week or month. The Borrower should provide documented information on the source of any substantial amount deposited in the past two months. If the Borrower's monetary assets are much higher than his gross income, the underwriter should check the source of these funds even if they were received earlier than two months before. If the Borrower has a currency account in a foreign Bank, the source of these funds for at least two last months should be checked.

4.8.4 Borrower's Other Property. The value of other assets (jewelry, art, other real estate etc.) is not included into the gross income when its is calculated to define the maximum loan amount, but may serve as an indicator of the Borrower's wealth and a positive compensating factor. Other property owned by the Borrower whether real estate or personal is not taken into account when calculating the maximum loan amount the Borrower is eligible for. However, the property may be used as a compensating factor in qualifying.

4.9 Evaluation of Borrower's Credit History

When analyzing the Borrower's willingness to repay the loan, the underwriter should establish the level of trust which can be extended to the Borrower on the basis of subjective personal characteristics as well as objective review of the Borrower's payment history with respect to other verifiable obligations. In addition to the payment pattern on previous loans, the underwriter should also check for any outstanding debts, their term and amount of monthly payments.

4.9.1 Credit Verification. Because there is no official entity in Russia for providing credit reports, the Bank must itself establish a credit history for each Borrower. A Verification of Loan and Payment History, Form ____ must be sent to:

- Former and current landlords or mortgage holders where appropriate
- All lenders listed in the application
- Utility electricity and/or phone billing agencies

In addition, the Bank must obtain other credit references for a minimum of four. Since many Borrowers have little or no established credit history the Bank may be required to obtain payment history verifications from alternative sources including but not limited to:

- Payment of alimony or child support
- Payment of child care expenses to an child care provider unrelated to the Borrower
- Payments on personal loans to individuals unrelated to the Borrower

Applicants who withhold information about their past credit obligations may be concealing other relevant information. If undisclosed debt is discovered, an explanation should be required and the Borrower should be underwritten with caution. To help avoid this situation, the loan officer should inform the Borrower that the Bank may demand acceleration of the loan on the grounds of withheld information.

4.9.2 Analysis of Borrower's Payment. A twelve month credit history should be sufficient for the underwriter to make a reasonable conclusion about the obligations assumed by the Borrower under the new mortgage loan.

Greater emphasis should be placed on the Borrower's overall pattern of meeting financial obligations on a timely basis rather than a few minor occurrences. In some cases, the Borrower's credit history may reflect an occasional late payment that is not necessarily attributable to the Borrower's disregard for credit obligations. This is particularly important in view of the fact that recent changes may have resulted in financial difficulties for many Borrowers. Strong compensating factors may offset a small number of moderately late payments during the previous twelve months. A written explanation from the Borrower should be required for all previous late payments of thirty days and more.

4.9.3 Analysis of Housing Payment History. Because a mortgage loan represents a future housing-related obligation, the Borrower should provide evidence of timely payments for housing in the past. The underwriter should verify payments of rent, technical maintenance and property tax, for the previous 12 months against the respective payment books.

Property Tax. The current rate of property tax is 0.1 percent of the balance value of an apartment or house. Periodic adjustments of the balance value increase the payments, but these amounts are not so important in the Borrower's expenses structure. Nevertheless, the Bank should carefully monitor the correctness and timeliness of property tax payments of every Borrower, because nonpayment may result in sanctions on the part of tax authorities. To avoid this, it is reasonable to include the amount of property tax into total regular payments on the loan. The amounts should be collected in a special account with subsequent transfer to the tax inspection's account.

State Rent. Previously, rent for a state apartment amounted to a very small percentage of residents income. Some Borrowers were not always timely on every single payment during a 12 months period. This does not necessarily indicate disregard for previous credit obligations, but the underwriter should establish the reason for all delays and their impact on future payment obligations.

Commercial Rent. If the borrower previously paid commercial rent under a registered rental agreement or mortgage payments, the borrower's timely payment of this obligation is considered an excellent indicator of the borrower's attitude toward his or her financial obligations. Any delay of 30 days or more in the payment of commercial rent or mortgage must be explained in writing. Unjustified delays of more than 30 days in the past 12 months may be sufficient grounds to decline a loan.

Communal Services, Electricity and Telephone. These payments are verified against respective payment books. An Borrower residing in state-owned housing may have a record of past delays. The underwriter should establish whether the delay occurred through Borrower's disrespect of credit obligations or because of the inconvenience involved in payment of petty amounts. However, the Borrower should have no arrears at the time of application. Termination of services for nonpayment in the past may be regarded as strong reason for declining the loan.

4.10 Evaluation of Collateral

In the event the Borrower fails to repay the loan as agreed, the primary security for the debt is the collateral real estate. The Bank must ensure that the property provides sufficient collateral to secure the loan. The underwriter must consider three factors when reviewing collateral.

- Legal purity of the ownership interest
- Value of the property in relationship to the loan amount
- Physical condition of the property

4.10.1 Right-Establishing Documents. Verification of the right-establishing documents for the collateral, the "legal title" or ownership rights to the subject property is the responsibility of the Bank. The Bank must warrant to the Agency that its legal experts have checked the documents certifying ownership of the purchased housing unit to exclude the possibility of intervening claims of third parties to the mortgaged property. Any successful claim against title subsequent to purchase of the credit by the Agency will be grounds for repurchase of the asset by the Bank.

4.10.2 Appraisal Requirement. The Bank will ensure that every property which serves as collateral for a loan delivered to the Agency has been appraised within six months of the date of loan origination by a licensed member of the Society of Appraisers. And that the appraisal has been reviewed by the Bank underwriter and found satisfactory. Appraisals must be completed on the Residential Appraisal, Form, ___, approved by the Agency.

4.10.3 Appraisers Responsibilities. The appraiser provides the lender with a detailed description of the property and an opinion of the market value, that is the value that a willing buyer would pay to a willing seller in an open market and without coercion. Evaluation of the loan collateral should involve a set of factors affecting the market value of the subject property:

Condition of residential premises:

- Composition, floor plan, total and living space
- Age, condition of structures, walls, floors and ceilings, systems of heating and water supply, repairs required at present or in foreseeable future
- Comparison of the subject housing with similar properties in terms of characteristics and quality

Land plot

- Location, plan, shape and size
- Topography, composition and description of soil
- Availability and access to utility lines

Neighborhood

- Location (distance from the center, proximity to highways, transport access)
- Environmental conditions, proximity to industrial enterprises (if any)
- Availability of developed infrastructure, general level of development of the territory
- Prestige value of the location, attractiveness to the residents, average price of a unit of housing space
- Types of housing: single family or 2-4 family cottages, multifamily buildings, etc., rental or owned housing, etc.
- Economic status of the district, development forecasts, prospects for growth or fall of prices for housing

Sale Price of Comparable Properties

- Sale prices of at least three properties of comparable, location, size and features which have sold in the past six months
- Average marketing time for comparable properties

Replacement Cost - Cost to rebuild the house or unit

4.10.4 Underwriter's Responsibilities. The underwriter must review the appraisal to determine if the proper methodology was used in determining the value and if, based on the appraisal information, the property meets the minimum standards of the Bank and the Agency. Accurate appraisal of the subject property is an important factor reducing the credit risk and the implications of Borrower's inability to repay the loan.

4.10.5 Minimum Property Standards. The Agency requires that all properties which collateralize its credits meet minimum standards for health and safety of the occupants. Should the appraisal reveal any condition which indicates that the structure is unsafe or cannot provide minimum acceptable health and sanitation services consistent with local area standards, the Bank must reject the property as collateral. (This section should be expanded to define property conditions or types which are not acceptable, i.e., communal housing, lack of indoor plumbing, permanent residences without access to heat or electricity etc.)

4.10.6 Loan to Value Ratio. Following review and acceptance of the appraisal, the underwriter will use the lesser of the appraised value or the contract sales price to calculate a loan-to-value ratio (LTV). The LTV establishes the maximum amount the Bank may lend based on the security of the collateral. The Maximum LTV the Agency will accept is 70 percent of the lesser of appraised value or sales price. LTV is calculated as:

$$LTV = \frac{\text{loan amount}}{\text{value of mortgaged real estate}}$$

Note: The LTV may be more or less than the maximum loan amount based on the Borrower's ability to repay as calculated in 4.7)

4.10.7 LTV Risk. This ratio has a significant effect on the level of risk assumed by the Bank. The higher the LTV the greater the risk. LTV should be defined, among other factors, with regard for the type of housing loan.

4.11 Risk Analysis and Underwriting Decision

When analyzing the risk factors and making the credit decision the Agency encourages the Bank to:

Place primary emphasis on the Borrower's capacity to repay the debt.

Secondary emphasis should be placed on the Borrower's capital, especially when the Borrower is using personal funds to close to sale.

Consistently poor credit history should eliminate a Borrower from consideration, however a lack of credit history should not be considered a negative factor if there are other compensating factors.

As long as the value and condition of the collateral meet Agency requirements, the collateral will not influence the credit decision, however a lower loan-to-value (higher down payment) can be a significant compensating factor in the final analysis.

Other risk factors to be considered include frequent change of jobs without an increase in income; income growth slower than the inflation rate; and payment shock. Payment shock is connected with increase in monthly expenses for housing because of payments on the new mortgage loan in the total expense structure. In case of unforeseen increase in the basic subsistence needs of the Borrower and his family this may lead to defaults on the loan. To avoid this, the underwriter should take greatest care to define the maximum share of loan payments in Borrower's income to lower the non-payment risks.

4.12 Compensating Factors

Compensating factors are as a rule subjective in nature and may not be estimated quantitatively. The underwriter should determine whether a compensating factor or a combination of compensating factors are strong enough to offset certain negative aspects of income level or stability of a potential Borrower. In some cases a compensating factors may give the underwriter grounds to approve the loan which otherwise would have been declined. Below are some common examples of compensating factors:

Substantial cash and other highly liquid assets in excess of the amount required for down payment, loan closing and other transaction costs may be regarded as a strong compensating factor because it proves availability of additional sources of funds besides the monthly income which can be used to make monthly payments on the loan.

Substantial assets in movable and immovable property may be regarded as a strong compensating factor affecting decision on the loan application because it shows the Borrower's ability to make savings and assures the Borrower's ability to repay the loan in case of income decrease.

Borrower's age and career prospects. A young Borrower with a strong educational background and a promising profession may be regarded favorably as his education and age give reasons to expect that during the loan term the Borrower's income will grow and the burden of monthly payments will be decreasing.

A high level of residual income can be used as a compensating factor if the total obligations-to-income ratio exceeds 30-40 percent. Residual income is calculated by estimating the income required for basic subsistence according to lifestyle by the Borrower and subtracting it from the Borrower's gross income. The remainder is the residual income.

4.13 Underwriting Calculation Examples

What follows is an example of the calculations used to determine Borrower eligibility and loan-to-value. The assumptions used in the calculation are:

Borrower's monthly income	10,000,000

Borrower's monthly obligations 1,500,000

Appraised value of the property 120,000,000

Loan term 5 years

Interest rate 30 percent

Bank loan fees and sales costs of 2 percent of the loan amount

4.13.1 Calculation of Expense to Income Ratios. On the basis of Bank's criteria for PTI_1 and PTI_2, define the maximum amount of monthly housing expenses in the aggregate monthly income of the Borrower, choosing the lesser of (1) or (2):

Housing Expense to Income Ratio (1) - Maximum monthly housing expenses = (aggregate monthly income) x PTI1

Example:
PTI_1 = 40%
Aggregate monthly income = 10,000,000 rubles
Maximum amount of monthly housing expenses = 10,000,000 x 0.4 = 4,000,000 (rubles)

Obligations to Income Ratio (2). - Maximum monthly housing expenses = (aggregate monthly income) x PTI_2 - monthly obligations ("total" in Application, Art.VII)

Example:
PTI_2 = 50%
Aggregate monthly income = 10,000,000 rubles
Borrower's obligations = 1,500,000 rubles
Maximum amount of monthly housing expenses = 10,000,000 x 0.5 - 1,500,000= 3,500,000 (rubles)

Choose the lesser of ratios (1) and (2), which is 3,500,000 rubles. This figure is the maximum permissible amount of housing expenses of the Borrower according to the Bank's criteria.

4.13.2 Calculation of Maximum Monthly Payment. Knowing the amount of housing expenses, we can find maximum permissible amount of the monthly payment on the loan (P&I) by subtracting taxes, insurance and technical maintenance from the total housing expense.

Example:

Maximum Housing Payment (above)		3,500,000
Monthly property tax (Art.V)	10,000	
Monthly premium on life, disability and property insurance	800,000	
Technical maintenance and other housing expenses (Art.V)		300,000
P&I (monthly loan payment) =	2,390,000	

4.13.3 Calculation of Maximum Loan Amount. Now using formula (1-1) we find maximum loan amount the Borrower is eligible for:

Loan amount = (P&I)(1-(/(1+i)^n)i (annuity payments formula), where:
n - number of payment periods (months, id repayment is monthly),
i - interest for the respective period (month),
P&I - maximum amount of monthly loan payment, including loan principal and interest.

Example:
P&I = 2,390,000 rubles
Loan term - 5 years
Interest rate - 30 percent
Loan amount = 73,871,689 rubles

4.13.4 Calculation of Maximum Loan Amount Based on Value. The maximum loan a Borrower is eligible for is calculated on the basis of LTV established by the Bank, and the value of mortgaged property is defined as the lesser of the sale price of the real estate or its appraised value established by an appraiser. LTV may differ depending on the purpose and term of the loan, as well as other factors. Loan amount = property value x LTV.

Example:
LTV = 70%
Appraised value of the property = 120,000,000 rubles
Loan amount = 120,000,000 x 0.7 = 84,000,000 (rubles)

4.13.5 Maximum Allowable Loan. In view of the Borrower's paying capacity, maximum loan amount is 73,871,689 rubles. Based on the value of collateral, maximum loan amount is 84,000,000 rubles. The Bank should lend based on the lesser of these two factors, therefore the maximum loan amount in this example is 73,871,689 rubles.

4.13.6 Cash Requirement. In order to close the transaction the Borrower will need sufficient cash for the down payment, loan fees and sales costs. At least 50 percent of this cash must be from the Borrowers own funds and the balance from "acceptable sources."

Example:

Sales Price	120,000,000
- Loan Amount	73,871,689
Down Payment	46,128,311
Sales Price	120,000,000
X	2%
Costs and Fees	2,400,000

Required Cash is 48,528,311 rubles

4.13.7 Underwriter's Recommendations. In a general case, the underwriter examines:

- Requested loan amount
- Maximum loan amount the Borrower is eligible for based on income
- Maximum loan amount based on property value
- The amount of cash required from the Borrower to close the transaction

If the requested loan amount is higher than the loan amount calculated on the basis of Borrower's paying capacity, the underwriter should determine if:

- The Borrower has cash or other liquid assets which he is ready to sell to raise the down payment amount.
- The Borrower has adequate compensating factors which demonstrate his ability to repay the loan in a proper and timely manner.
- The Borrower can find a different unit for a lesser price.

If the requested loan amount is higher than the loan amount calculated on the basis of mortgaged property value, the underwriter should compare maximum loan amounts. If the loan amount calculated on the basis of Borrower's paying capacity is higher or equals the requested amount, the Bank should decide whether the property value risk is properly compensated by the excess income capacity. Any such waivers to the Agency LTV ratio must be completely documented are subject to Agency review.

4.14 Documentation of Underwriting Recommendation

The underwriter must document the loan approval or rejection determination on the Underwriting Statement, Form ___, for consideration by the Loan Committee.

4.15 Loan Committee

The Bank will delegate a loan committee to review recommendations made by underwriters to determine whether the loan presents an acceptable level of risk, and that it complies with all of the underwriting requirements established by the Bank and the Agency. Members of the loan committee should be officers of the Bank with significant experience in lending and risk management and knowledgeable about mortgage requirements.

4.16 Minimum Underwriting Requirements

While the Agency expects each Bank to adhere to the underwriting standards detailed above, the following list represents minimum requirements for underwriting and origination of mortgages acceptable for delivery to the Agency.

4.16.1 Forms. The Bank must use standard forms approved by the Agency including:

- Request For Information - State Tax, Form ___
- Request For Information - Bank, Form ___
- Request For Information - Employment, Form. ___
- Verification of Loan and Payment History, Form ____
- Housing Mortgage Loan Application, Form ___
- Underwriting Statement, Form ___
- Society of Appraisers Residential Appraisal, Form ____

4.16.2 Qualifying Ratios. A Borrower's housing cost to income ratio may not exceed 40 percent and the expense to income ratio may not exceed 50 percent. Exceptions must be fully explained by the underwriter on the basis of significant compensating factors.

4.16.3 Down Payment. The minimum acceptable down payment is 30 percent. The Borrower must have sufficient capital from his own funds to provide at least ____ percent of the required down payment and closing costs, and the balance of the capital needed to close must come from "acceptable sources" as defined in Section 4.2.2 above.

4.16.4 Collateral Value and Condition. The value of the collateral must be established by an independent appraisal completed by a member of the Society of Appraisers. The loan-to-value ratio may not exceed 70 percent of the lesser of the appraised value or sales price. The property must be in reasonable repair and not constitute a risk to health or safety of the occupants.

4.16.5 Ownership Rights. The Bank warrants that it has fully examined the ownership records of the collateral property. Any subsequent defect in the title shall be a cause for repurchase by the Bank.

4.16.6 Payment History. The Bank must obtain at least four credit verifications including a mandatory verification of the payment history at the Borrowers former residence. If the Borrower has limited credit history the Bank must document the compensating factors which justified its favorable credit decision.

5. LOAN SALES TO THE AGENCY

This Chapter covers standard policy and procedural requirements related to selling mortgage loans (credit agreements and mortgage agreements) to the Agency. When the Bank enters into a transaction to sell mortgage loans, the Agency will remit cash proceeds to the Bank in accordance with the provisions of the Guide. The Bank may also request a forward commitment for delivery and funding of a pool or pools of loans at a future date. The forward commitment will specify the interest rate, delivery deadline and other terms of the loans eligible for delivery. Notwithstanding any provisions of this Guide, it is the responsibility of Banks to ensure full compliance with any and all local and national laws governing mortgage purchase and sale practices.

5.1 General Purchase Provisions

5.1.1 Loan Type. The Agency will purchase only those loans defined as Eligible Loans in Chapter 3 of this Guide or any amendments thereto.

5.1.2 Remittance Type. The Agency will purchase only mortgages that are accounted for as "Scheduled/Scheduled" remittances. This is defined as monthly remittance to the Agency of scheduled interest and scheduled principal whether or not collected from borrowers, as well as any unscheduled principal collected from borrowers each month for all loans serviced by the Bank. All servicing related information with respect to reporting, remitting and reconciliation of mortgage loans sold to the Agency is incorporated in Chapter 8 of the Guide.

5.1.3 Selling and Servicing Option. The Agency will only purchase loans "With Recourse" to lenders. This is defined as the lender assuming the entire risk of loss from a borrower default. This obligation for default risk is met by the Bank's repurchase of a delinquent mortgage during the fourth month of borrower default as more fully discussed in Section 6.10.4, *Repurchase of Seriously Delinquent Loans*.

5.2 Commitments

In addition to the Mortgage Selling and Servicing Agreement executed between the Agency and a Participating Bank, two other contracts control the sale of loans to the Agency. A Master Commitment Agreement ("Master Commitment") and a Commitment For Mortgage Purchase and Delivery ("Purchase Commitment"). All three contracts must be executed by the Bank and the Agency prior to loan delivery and sale.

5.2.1 Master Commitment. This is an "umbrella" document that sets out the terms under which the Agency will do business with an individual Bank. Specifically, it outlines the effective date and expiration date; the maximum volume (in dollars and/or rubles) of the mortgages that the Bank is authorized to sell to the Agency during the commitment period; and the specific characteristics of the loans that may be sold. This commitment may incorporate any variances from standard policy described in the Guide, or detail special considerations granted to a specific Bank that may not be granted to other Banks. The Master Commitment guarantees the Bank of the availability of funds to make mortgage loans; and commits the Agency to buy mortgage loans from the Bank in accordance with the terms of the Master Commitment.

5.2.2 Commitment Fee. A commitment fee of one percent of the face amount of the Master Commitment will be payable by the Bank within five (5) business days of the execution of the Master Commitment.

5.2.3 Purchase Commitment. The Agency will issue a Purchase Commitment as soon as the Bank is ready to deliver loans to the Agency. The Purchase Commitment is a legal contract that states all terms relating to product, price, fees, underwriting variances, method of delivery and the date of delivery of the loans.

5.2.4 Forward Commitments. An alternative form of Purchase Commitment is a Forward Commitment wherein the Agency agrees to purchase, at a predetermined price and terms, loans to be delivered by the Bank at the future time. This type of a commitment is binding on both parties. The Bank will be subject to penalties if it fails to deliver loans specified in the forward commitment. The Forward Purchase Commitment will include the following terms:

- Date of the Forward Purchase Commitment
- Term of the commitment (15 days, 30 days, 45 days, 60 days). Forward Purchase Commitments will not be issued in excess of 60 days
- Expiration date
- Dollar or ruble commitment amount
- Loan type - generally separate Purchase Commitments will be issued for each loan type

- Original term of the loans (5 year, 7 year, 10 year etc.)
- Property type
- Expected yield to Agency
- Loan-to-value ratios
- Minimum servicing fee percentage
- Minimum margin percentage (applies to adjustable rate loans only)
- Delivery fee
- Maximum differential between note rates and yield to the agency

5.3 Loan Closing

Mortgage loans must be underwritten in accordance with the provisions of Chapter 4 of this Guide. Loans which receive underwriting approval must be closed on appropriate instruments that are legal and enforceable in the jurisdiction in which the mortgaged property is located. It is the sole responsibility to the Bank to ensure that the mortgage documents are fully enforceable, the Bank is clearly identified as the mortgagee and that ownership of the loan is vested in the Bank until the loan is paid in full. At a minimum each loan must include the following closing documents:

- Completed *Housing Mortgage Loan Application*, Form ___
- Real Estate Purchase Contract, or Lease Purchase Agreement signed by the seller and borrower
- Verifications of employment and income from all borrowers
- Verification of prior housing expense
- Verification of funds available to close
- Verification of credit history and/or references
- Property appraisal completed within six months of closing by a licensed member of the Society of Appraisers
- Credit Agreement executed by the borrowers
- Mortgage Instrument executed by the borrowers
- Evidence of clear title
- *Loan Closing Statement*, Form ___
  Loan Funding Accounting Statement, Form ___, completed by the Agency
  Escrow Accounting Verification, Form ____
- Verification of payment of taxes, technical maintenance or other lienable items
- Verification of recording of mortgage documents
- Verification of endorsement of the credit agreement
- Any other documents required by law or practice within the Russian Federation

5.4 Delivery

Once a commitment has been issued by the Agency, this becomes an enforceable obligation. Failure to effect "Good Delivery" as defined in below, can severely limit a Bank's ability to deal with the Agency in the future and could result in legal action. However the Agency will be considerate if the failure is infrequent or is caused by circumstances beyond the Bank's control.

5.4.1 "Good Delivery." The Bank is considered to have made "Good Delivery" and satisfied its obligation under a Purchase Commitment, if it delivers mortgage loans equal to an amount that falls below the commitment amount by no more than five percent. Conversely, the Agency has a residual balance provision which allows the Bank to deliver additional mortgage loans in an amount that exceeds the original commitment amount by no more than five percent without paying an additional commitment fee. These provisions exist because the Agency recognizes that unusual circumstances beyond the lender's control can prevent the Bank from honoring the commitment.

5.4.2 Imposition of Penalty Fees. The Agency reserves the right to impose penalty fees when it has reason to believe that the Bank deliberately structured its delivery to be five percent more or less than the negotiated amount because it was trying to take advantage of changing market conditions to the detriment of the Agency.

In all cases the Agency will make every effort to be reasonable in assessing such penalty fees. ***(What is timing and form for payment of penalty fees? What are sanctions for non-payment? Is there an appeal process? How are the fees to be calculated?)***

5.4.3 Pair-Off Option. Banks may repurchase or "Pair-Off" a Purchase Commitment if they are unable to deliver loans to the Agency to satisfy the delivery requirements or for any other reason fail to deliver loans to the Agency as required in the Forward Purchase Commitment. The fee is one percent of the unfulfilled commitment amount.

5.4.4 Delivery Warranties. The Bank warrants that all mortgage loans sold to the Agency conform to Agency requirements and specifications and satisfy the general mortgage eligibility requirements and underwriting guidelines identified in this Guide. The Bank further warrants that the description of the mortgages set out in the applicable delivery documents is true and correct.

5.4.5 Delivery Package. All mortgage loans submitted to the Agency for purchase must include all of the documents listed above in 5.3, Loan Closing. In addition each delivery package must include the following:

- A copy of the Purchase Commitment issued by the Agency covering the specific loan or group of loans being delivered

- A *Loan Delivery Schedule*, Form _____
- The original credit agreement and mortgage agreement executed by the borrower and transferred to the Agency as more fully described below

5.4.6 Assignment of Mortgage. An authorized officer of the Bank will execute an assignment for each loan sold in a form which meets the appropriate legal requirements to convey title to the Agency at the point of sale. The assignments must be recorded.

5.4.7 Endorsement of the Credit Agreement. An authorized officer of the Bank will execute an endorsement for each loan sold, which transfers its rights and title to the Agency as of the date sold. ***(Approved language for the assignment and endorsement needs to be developed)***

5.4.8 Delivery Format. Banks may select either manual or magnetic tape format for delivery of loan level information. Both manual and magnetic formats of the *Loan Delivery Schedule* contain identical information.

5.5 Funding

By selling mortgage loans to the Agency for cash, the Bank acknowledges and agrees that all of its rights, title and interest in those mortgages is sold, transferred and otherwise conveyed to the Agency as of the date of "Funding" of the purchase proceeds by the Agency. Both the Bank and the Agency intend for all cash deliveries to be an absolute sale.

5.5.1 Timing. The Agency will review all the delivery documents as outlined above. Upon completion of the review the Agency will fund the loan purchase. The time required for the review may vary based on the volume and type of loans submitted for purchase. In the event that the purchase review is expected to take longer than ten (10) business days, the Agency will notify the Bank of the anticipated funding date. ***(Is ten days a realistic number?)***

5.5.2 Method. Payment of purchase proceeds will be made by wire transfer unless requested otherwise by the Bank.

5.5.3 Funding Amount. The Agency and the Bank will be jointly responsible for confirming that the purchase proceeds wired to the Bank reflects the current principal amount and accrued interest due. The *Loan Purchase Confirmation and Settlement Notice*, Form ___, will be completed by the Agency. The Bank is responsible for review of the funding calculations to ensure accuracy of the funding amount.. Any discrepancy must be brought to the Agency's attention immediately so as to correct funding errors in a timely manner.

5.5.4 Calculations. Principal and interest calculations for funding purposes are based on the following formulas:

Net Principal a = dxb where

a = net principal
d = current loan (s) balance, and,
b = price (in decimals)

Interest c = dxe
------ x [f-l]
360 where

c = interest
d = current loan (s) balance,
e = the pass through rate, and
f = funding or settlement or purchase date

5.6 Post Purchase Loan Review

For quality control purposes the Agency will maintain both pre and post purchase loan quality control programs. In addition, each Participating Bank is required to maintain an effective "Post Purchase Review System". Such a system verifies the existence and accuracy of:

- Legal documents
- Credit documentation
- Quality of property appraisal
- Soundness of the underwriting decision

Further, through this detailed review of each loan sold to the Agency, the Bank will assure that:

- Mortgages conform to the Bank's own policies and procedures for origination, processing, underwriting, closing and delivery
- Mortgage loans are of a quality acceptable to the Agency and its institutional investors
- Loans terms and the origination process conform with all local and national laws and regulations
- The Bank has complied with all Agency selling and servicing guidelines
- The Bank is maintaining its own standards for loan quality and production

The Bank must maintain written policies and procedures for carrying out the Post Purchase Loan Review function. Those policies and procedures must be made available to the Agency upon request and, at a minimum, include the following provisions:

5.6.1 Designated Staff. To insure the integrity and objectivity of the Post Purchase Loan Review process, staff assigned to this function should have no direct involvement with loan origination, underwriting or approval, nor should they report to supervisors whose work product they will review.

5.6.2 Percentage of New Mortgage Originations Subject to Review. A minimum of ten percent is recommended for Banks with significant loan production. Banks which originate less than three (3) loans per month should conduct Post Purchase Review of all new originations. ***(verify with local banks if three is a good break point)***

5.6.3 Basis for Loan Selection. The selection process should ensure that each branch, originator, processor, underwriter, closer, geographical area, and loan type are targeted.

5.6.4 Timing of Review Process. The Agency recommends that Post Purchase Reviews be completed no later than 30 days from the date of loan closing or funding of the sale by the Agency.

5.6.5 Review Procedures. The Bank must establish review procedures appropriate to the type and volume of loan originations. Areas of investigations should include:

Ensure that all required legal documents:

- Are in the loan file
- Are complete and legible
- Have correct spellings of names, addresses, etc.
- Accurately reflect the terms of the transaction
- Have original signatures, recording stamps, etc.

Review the credit documentation to ensure that:

- All required applications, information and verifications were obtained
- Credit documents are complete and contain original signatures
- Verifications confirm the information provided by the Borrower on the application

Review the appraisal to verify that the:

- Appraisal date is within 6 months of the date of loan origination and funding
- Currently approved Society of Appraisers form was used
- Appraisal is complete
- Appraisers used the required number of comparable sales, made reasonable adjustments for value of features and that the opinion of value is supported by the information contained in the appraisal report

Review the soundness of the underwriting decision to determine if:

- The collateral and loan terms meet the Agency's eligibility criteria
- The loan was underwritten in compliance with both the Bank and the Agency's underwriting guidelines
- The underwriting decision is supported by the available documentation
- Any unusual circumstances or considerations are properly documented
- Information in the closing documents reflects the closing instructions prepared by the underwriter

5.6.6 Percentage of Loans to be Re-verified. Complete re-verification of employment, deposits, housing and credit verifications should be completed on a percentage of the total loans subject to review. The Agency recommends that Banks, less experienced in mortgage originations, initially re-verify all loans subject to post purchase review. The percentage of loans subject to re-verification can gradually de creased as mortgage lending experience is gained.

5.6.7 Findings and Corrective Action. The procedures must include a process for reporting findings and initiating corrective action based on the findings. The Agency recommends that Bank management receive a monthly reporting of loans selected for Post Purchase Review and findings.

5.6.8 Repurchase of Sub-standard Loans. If the post purchase review process identifies mortgages which do not meet Agency loan quality standards, the Bank is required to notify the Agency within ___ working days ***(need to define notification time and method)***. Upon receipt of such notification the Agency will may request repurchase as described in Section 5.8.

5.7 Document Custody

Following delivery and funding, the Agency and/or its designated custodian, will retain custody of original loan documents including the credit agreement, mortgage agreement, assignment and endorsement. Documents will be secured in fire-safe storage facilities.

5.7.1 Bank Access to Documents. If during the life of the loan, the Bank has a need to obtain the original loan documents, or certified copies of original loan documents, the Bank may submit a *Request For Documents,* Form _____ to the Document Custodian at the address supplied by the Agency. The Agency will ***(will not?)*** accept faxed requests for documents.

Name
Title
Address
Phone/Fax

5.7.2 Delivery of Released Documents. Generally, original documents or certified copies will be shipped via registered mail within five (5) business days of receipt of the request by the Agency or its Document Custodian. Circumstances which require more immediate delivery will be considered on a case by case basis.

5.7.3 Return of Documents. Original documents supplied under the terms of 5.7.1 must be returned to the Agency within 30 days of release or a *Repurchase Letter* will be executed by the Agency, requiring the Bank to return the documents or repurchase the loan. Extensions of the 30 day period may be granted by the Agency or its Document Custodian based on a written request from the Bank, describing the continued need for the documents.

5.7.4 Document Custody Fees. ***(Will the Agency charge document custody fees? One-time delivery fees, recurring monthly charges, fees for release or copies of documents?)***

5.8 Mortgage Repurchase

All loans purchased by the Agency are purchased "With Recourse" to the selling Bank. The Agency may exercise its recourse option by requiring repurchase of a loan or pool of loans in the event any of the following conditions exist:

- A breach, by the Bank of any warranty of the Agreement, Master Commitment or Purchase Commitment
- Servicing deficiencies that have had a materially adverse effect on the value of the property
- The determination, either by the Bank or the Agency that the loan does not meet the Agency's eligibility or underwriting criteria
- Default by the Borrower (90 or more days from the due date of the last paid

installment)

- Failure by the Bank to remit payments to the Agency in accordance with the agreed upon schedule
- Voluntary request for repurchase by the Bank

Upon receipt of a written demand from the Agency, the Bank shall have 15 business days to complete the repurchase. The repurchase amount shall be calculated as, the original principal balance of the loan, plus all interest due but not paid, less the total amount of principal received by the Agency.

5.8.1 Repurchase Demands. The Agency will initiate a demand for repurchase by sending a *Repurchase Demand Letter*, Form ____ to the Bank, indicating the reason for the repurchase and the repurchase price. The Bank shall have 15 business days from the date of the *Repurchase Demand Letter* to remit the funds due or submit a written appeal to the Agency.

5.8.2 Informal Review Process. If the Bank believes that the repurchase demand is based on inaccurate or misconstrued information, the Bank is encouraged to contact the Agency as soon as possible to resolve any differences of opinion or clarify any record keeping or accounting inaccuracies. As a result of these discussions, the Agency will either rescind or let stand the *Repurchase Demand Letter.*

5.8.3 Formal Appeal Process. If the Bank believes that the repurchase demand is not justified, the Bank may appeal the repurchase by delivery of a written explanation for its position within 15 business days of the date of the *Repurchase Demand Letter*. The Agency will review the Bank's appeal, and issue a final ruling within 30 days of the date of the initial *Repurchase Demand Letter.* The final ruling of the Agency will be binding on the Bank. Repurchase demands issued as a result of Borrower default may not be appealed.

5.8.4 Legal Action. If the Agency is required to take legal action to enforce its repurchase rights, the Bank will be liable for attorney's fees, costs and related expenses.

5.8.5 Bank Initiated Repurchase. The Bank may initiate a request to repurchase either when it wishes to discontinue its contractual relationship with the Agency, or for other reasons. The Bank must submit a written request to the Agency which identifies the mortgages; explains the reason for the request, sets forth the specific terms and conditions of the repurchase and the price the Bank is offering. After evaluating the offer, the Agency will notify the Bank of its acceptance or declination, or any counter proposal. The Agency is under no obligation to agree to any voluntary repurchase request.

5.9 Mortgage Substitution

As an alternative to repurchase, the Agency may allow the Bank to replace a defective mortgage with a qualified substitute mortgage. In some instances the Agency may require substitution if the Bank has a reasonable number of qualified mortgages available. The Agency will indicate in its *Repurchase Demand Letter* if substitution is an option and identify specific requirements of the substitute loans.

5.9.1 Requesting Substitution. A Bank wishing to request substitution must submit a written list of mortgages to be substituted using the *Loan Delivery Schedule*, Form ____. The request and loan schedule must be received by the Agency within 15 business days of the date of the *Repurchase Demand Letter.*

5.9.2 Agency Approval. Unless otherwise contractually provided in the Agreement or Master Commitment, the Agency is under no obligation to approve a substitution request and may elect substitution or repurchase based on its own business needs. Should the Agency agree to allow substitution of defective loans, the Agency reserves the right to underwrite some or all of the loans to be substituted.

6. SERVICING STANDARDS AND REQUIREMENTS

6.1 Servicing Contract

The contractual obligation for servicing is incorporated in the Agreement and includes all of the provisions of the Guide and any special servicing provisions negotiated with the Bank as defined in the Master Commitment.

6.2 Compensation

As compensation for servicing the Bank may deduct ____ basis points from the interest collected from Borrowers the servicing fee stipulated in the Agreement (and/or Master Commitment), prior to remitting loan payments to the Agency. The Bank is permitted to retain the interest spread earned on loan payment deposits from the date received until the remittance due date. The Bank may also retain reasonable late charges and fees charged for special services provided to Borrowers, as additional servicing income.

6.3 Assignment, Sale or Transfer of Servicing

The Bank may not assign, sell or otherwise transfer its servicing rights and responsibilities to any other entity without the written consent of the Agency. Any transferee must independently meet all of the Agency's bank eligibility criteria. The Bank may not assign, sell, transfer or pledge its servicing income or any portion thereof without the written consent of the Agency.

6.4 Servicing Standards

Servicing of a mortgage loan is a contractual right to receive mortgage payments from Borrowers as charges and transfer to receivers, (the Agency, tax inspectors, insurance companies, etc.) various parts of those payments in accordance with their purpose. The primary goals of servicing are:

- Providing customer service for the Borrower
- Protecting the interests of the Agency
- Earning a profit for the servicing Bank

This Chapter outlines acceptable servicing standards as they apply to preserving the value of loans delivered to the Agency. It does not purport to cover all servicing functions. Following the detailed discussion of servicing activities are the minimum requirements that Banks must meet to participate in the Agency loan program.

6.5 General Organization

Mortgage loans are serviced by a specialized department, adequately staffed and trained to comply with the servicing requirements of mortgage loans. The functions of the servicing department are described below.

Cashier

- Acceptance of Borrowers' mortgage loans payments
- Reconciliation of the amount of received to the amounts noted in the reports
- Transfer of the funds to the relevant accounts
- Maintaining loan accounts records
- Transfer of bills and payment statements to the accounting office

Bookkeeping

- Making notes on mortgage loans payments
- Calculation of new amounts of payments for mortgage loans with adjustable
- Making annual reports on loans
- Making payments for prepayment of the loan

Tax and Insurance Escrows

- Payment of property taxes and making insurance payments from the part of Borrowers

- Calculation of amount of relevant payments
- Keeping records of payments
- Delinquent Loan Servicing
- Prevention of disruption of a schedule of payments
- Working with Borrowers to resolve payment defaults
- Foreclosure proceedings

Financial Analysis

- Control over the process of collecting payments, over the schedule, over calculations of loan payments
- Analysis of the reasons of prepayment of loans, violation of terms of payments, non-payment of loans
- Preparation of statistics reports and making statistics analysis of loan prepayments, violation of terms of payments, non-payment of loans
- Evaluation of revenues, received from the servicing of mortgage loans and planning of flows of money in the entire loan portfolio

Other Administrative Services

- Providing information on loans to Borrowers and Investors
- Reporting
- Processing payoffs, assumptions, and other loan activities

6.6 File Maintenance

The Bank is required to provide safe keeping of all the documents on mortgage loans and mortgage loans pool. For this purpose the Bank must install special safe-box premises and initiate procedure for the handling of files by staff to avoid loss or destruction by file, negligence or other causes. Files refer to all forms of information gathered and collected on the Borrower, whether paper or electronic. Original credit documents must be delivered to the Agency for custodial care at the time of funding by the Agency as described in Chapter 5. Additionally the Agency may require the Bank to deliver some or all of the underwriting documentation for each loan prior to funding.

6.6.1 Agency's Right to Inspect Documents. The Agency has the right to request all or part of any file for loans delivered to the agency. The Agency may ask that copies of files be mailed to it for review or may contact the Bank to schedule an appointment for such review.

6.6.2 File Contents. At a minimum each loan file must contain the following documents connected with origination:

- Application for mortgage loan
- Verification of employment and income
- Verification of deposit, credit cards, other loans
- Report from tax inspection on absence of arrears
- Report on absence of arrears in communal payments
- Appraisal of the purchased property
- Loan agreement
- Contract on sale/purchase of a flat
- Copy of the mortgage agreement
- Insurance contract

Each file must contain the following documents in connection with for loan servicing:

- Schedule of planned and actual loan payments
- Loan account, reflecting all the operations on mortgage loans (payments for redemption, balance of the debt, interest payments, payments for a targeted account, penalties)
- Receipt for the taxes
- Receipt for insurance premiums
- Loan payment records
- Accountant's reports on the loan account
- Correspondence with the customer on the issues of changing the interest rate of the loan, insurance policy, in connection with delinquency
- Documents on foreclosure of the mortgaged property
- Reports on inspection of the mortgaged property
- Other documents and reports

If the loan has been delivered as part of a loan pool these additional documents must be in the loan file:

- List of mortgage loans in established form
- Documents on transfer of rights stipulated in loan agreement and mortgage agreement to the Agency for Housing Mortgage Lending
- Copy of the prospectus of issue for securities in the pool

6.6.3 Separate Files. For efficient operation of the mortgage loans servicing operation, a separate loan account and file must be maintained for each Borrower. The account must reflect the dates and amounts of all of the Borrower's payments, transfers, charged penalties.

6.7 Collection of Payments

Loan payments are made monthly. A loan payment consists of three parts: payment for redemption of the debt and payment for redemption of the interest and funds to be held in escrow to pay expenses of the Borrower (taxes, insurance etc.). The Bank calculates the mortgage loan amortization, which is a base for a mortgage loan payments schedule. An example of a plan of annuity mortgage loan amortization is presented in Attachment No 5. Servicing staff must allocate the payment to the proper accounts when received.

6.7.1 Partial Payments. Loan payments must be made in full amount, partial payments are not allowed. If the Bank receives a partial payment the Bank may deposit the payment into a suspense account and contact the Borrower to arrange for transfer of the balance. If the Borrower has not made satisfactory arrangements for payment of the balance with 30 days, the Bank should return the partial payment.

6.7.2 Application of Funds. When the funds are received from the Borrower they are distributed in the following order:

- Payments for targeted accounts (escrow accounts) for insurance and tax payments
- Penalties
- Interest
- Repayment of the loan principal

No payment will be rejected or considered delinquent solely because it does not include penalties or fees assessed by the Bank.

6.8 Acceptable Methods of Making Loan Payments

The Borrower in coordination with the Bank can use one of the following methods to make payments:

Allocations from the salary. The Borrower authorizes the employer to transfer monthly a fixed amount to the Bank's account by a payment order. Receivers of the paid funds, disposition of the funds (interest payments, repayment of the main debt, targeted account) are indicated in the payment order. The Bank should receive a relevant notice of readiness to transfer the required payments by the employer. The Bank should also verify the reliability of the employer's company.

Automatic charging payments off the current account in a Bank-lender under the order of the Borrower. There should be a demand to keep on the account the minimum monthly balance equal to the amount of monthly loan payments (payments for interest and repayment of the main debt), and payments for the targeted account.

Non-cash forms of payment transfer from any Bank convenient for the Borrower. A copy of a payment order noting the receivers of the payments, their disposal between various accounts and number of the loan contract, and then the original of the payment order is sent to the Bank. A coupon book can used for it. The Borrower gets 3 copies of payment orders with disposal of the sum of payment between the receivers (repayment of the main debt, of interest, targeted account, penalties) for each payment. The Borrower should provide the Bank with information on his account opened for these purposes.

Cash payments to the cash-desk of the Bank. To implement the operations on crediting the amount, the Bank opens a current (clearing) account for the Borrower, and funds are transferred to the relevant receivers from this account.

6.9 Escrow Administration

The Bank is required to protect the interests of the Agency by insuring the that property taxes due on the collateral are paid when due and the Borrower carries adequate property hazard, life and disability insurance. To satisfy this requirement the Bank's mortgage loan documents must allow the Bank to collect such sums from the Borrower on a monthly basis as are necessary to make these payments when the become due. The amounts collected will be deposited into targeted or "escrow" accounts on behalf of the Borrower and used only for payment of the expenses for which they were collected.

6.9.1 Insurance. In compliance with terms and conditions of a loan agreement the Bank shall demand the Borrower insure mortgaged property. Property shall be insured against damage and loss (as the result of fire, natural calamity, etc.). Property shall be insured for the benefit of the Bank acting as a beneficiary. The Bank shall keep an original copy of an insurance policy and an insurance contract in a loan file.

The minimum amount of the insurance coverage must equal the mortgage loan amount though it may be increased at the discretion of the Borrower. The insurance compensation shall amount to the lesser of two sums: full insurance cost of repairs, or the outstanding balance of principal. The Bank must be a named insured under the policy. The Bank will also require that the Borrower take out life and disability insurance equal to the loan amount under the same terms discussed above.

Insurance premiums shall be included in Borrower's monthly loan payments and deposited to the escrow account. On or before the payment due date, the Bank shall transfer the insurance premium to an account of an insurance agency within the terms specified in the insurance policy.

6.9.2 Taxes. The Bank must collect from the Borrower on a monthly basis an amount adequate to pay the property taxes when due. Tax payments shall also be deposited in the escrow account.

6.9.3 Non-Payment by Borrower. Payments to the targeted account are made monthly simultaneously with loan payments. The Bank will not transfer funds to repay the main debt and loan interest, if the payment doesn't include escrow funds. The funds are left indisposed on the current (clearing) account of the Borrower until the rest of the sum is transferred. For the period of delinquency the Bank charges penalties in the established order.

6.9.4 Calculating Monthly Escrow Remittance Amounts. The amount of payment to the targeted account is defined as 1/12 of the sum of the annual property taxes and insurance payments.

$$Re = \frac{T + I}{12}$$

Re - The sum of monthly payment to the targeted account
T - The year sum of the mortgaged property tax per year
I - The year sum of insurance payments stipulated by the mortgage property insurance contract

6.9.5 Annual Escrow Reporting Requirement. Annually the Bank must estimate the amount required to pay taxes and insurance when due. The Bank must provide the Borrower with an accounting of the Borrower's funds in the escrow account, Annual Mortgage Loan Report, Form ____ . Additionally, at the end of each year the Bank must send to the Borrower an Escrow Disbursement Statement, Form ____ confirming payments for property taxes and insurance payments and a statement of the calendar schedule of the years actual loan payments. The statement must include: (Can these two reports be combined?)

The amounts and dates paid the prior year

The estimated payments due for the coming year

Any resulting change in payment due

A refund of all amounts collected in excess of the amount due for the prior year if requested by the Borrower. At the Borrower's option the overage may be applied against escrow payments due for the coming year.

All notices of payment changes must be received by the Borrower 30 days prior to the effective date of the payment change. Escrow reports are also submitted annually to the Agency as described in Chapter 7.

6.9.6 Interest on Escrow Accounts. Interest is accrued on the funds in the targeted account (to the average monthly account balance) in accordance with the rates of deposits "poste restante" or in accordance with interest rate established in the Bank for one-year time deposits.

6.9.7 Other Escrow Collections. Additional payments (payments for additional insurance, condominium fees etc. may be transferred to the targeted account on the mutual decision of the Bank and the Borrower. In this case the Bank must have a written contract with the Borrower, which stipulates the following:

Amount of the additional payments and their designated purpose

Obligations of the Bank to accept monthly payments from the Borrower even if additional payments are not included

Terms of compensation to the Bank for providing this additional service

Avoiding Early Payment Default: New Borrowers present the highest risk of default. Servicing staff should assist new borrowers in meeting their mortgage obligation by placing courtesy calls on the eve of the payment due date for a period of three months or until the Bank is confident that the borrower has established good payment habits.

6.10 Delinquent Loan Servicing

It is in the best interest of the Borrower, the Bank and the Agency to make every effort to collect delinquent accounts promptly. The importance of early intervention on the part of the Bank cannot be overemphasized. The Bank must begin early to establish a relationship of trust with the Borrower, to identify the cause of the delinquency and to consider available options to avoid default and foreclosure. A recommended timeline for delinquent loan servicing actions follows:

(*Day After Missed Payment Action*)

Day 2

Begin assessment of daily late fees not to exceed .02 of the payment due.

Day 7
Attempt to contact the Borrower by phone.

Day 15
Mail the first warning letter and advice of late charges. Stress the importance of making phone or face to face contact the with Bank and provide a name and contact number.

Day 30
Mail the second delinquency letter via registered mail. Describe the seriousness of the situation and explain that help may be available if the cause of the default is beyond the control of the Borrower.

Day 30 to Day 45
Continue to attempt phone or face to face contact.

Day 45
Conduct a physical inspection of the property using the Mortgaged Property Survey Report, Form ____.

Day 60
If no contact has been made with the Borrower and attempts to work out repayment or other relief are unsuccessful, send via registered mail a "Notice of Intent to Foreclose", stating that foreclosure action will begin if repayment arrangements have not been reached with the Borrower within 30 days.

Day 90
Initiate foreclosure

Throughout Foreclosure
Continue to inspect the property at least every 90 days.

Continue trying to negotiate a repayment plan with the Borrower if it will be more cost effective than the foreclosure. Be careful to include legal counsel in any discussions with the Borrower to avoid invalidating legal action already commenced.

The Bank will maintain a register of all the telephone calls and letters to delinquent Borrowers. Bank officers performing the delinquent payment management functions should make up lists of Borrowers with problem loans (the loans with more than 30 days delinquency) daily.

6.10.1 Default Reporting. Concurrent with the monthly remittance of principal and interest, the Bank shall provide a Delinquent Loan Report, Form ___. The report will identify each loan that is delinquent for 15 or more days, give the total days of delinquency, identify the cause of the delinquency if it is known to the Bank and describe the Bank's actions to collect the amount due.

6.10.2 Work Out Options. As early as possible in the delinquency the Bank will contact the Borrower and determine the cause of the default. If the default is due to a temporary reduction in income or increase in expenses the Bank may recommend one of the following workout options:

Short Term Repayment Plan. The delinquency can be repaid in installments within less than 6 months during which time the loan will never become 90 days delinquent. This option does not require approval of the Agency.

Long Term Repayment Plan. The Borrower will need more than 6 months to get caught up with the payments and the loan is or may be more than 90 days delinquent for part of that time. The Bank should contact the Agency to discuss delaying the automatic 90 day repurchase requirement subject to the Bank's willingness to continue to advance scheduled payments.

Loan Modification. Changes to the interest rate, term or amount of the loan that will enable the Borrower to better afford the payments and reinstate the arrearages. This option requires approval of the Agency.

Advance in Second Position. A loan by the Bank to assist the Borrower in overcoming the hardship which caused the default. This option requires approval of the Agency.

If the default is not curable the Bank should try to avoid foreclosure by:

Pre-Foreclosure Sale. Allowing the Borrower time to sell the property rather than going through foreclosure. Require that the Borrower make at least partial payments during the marketing. Require that the property be offered for sale by a licensed Realtor at a price equal to or less than an appraisal completed within the last three months.

Alienation By Notary. If the Borrower has lost interest in the property suggest that the Borrower voluntarily transfer ownership to the Bank via notary. If the Borrower wishes to leave but is unwilling to abandon the equity consider a buyout at a substantial discount.

Neither of these options require Agency approval because they will not result in reinstatement and therefor will trigger automatic repurchase.

6.10.3 Waiving Late Fees and Charges. The Bank has the option to waive late fees and other charges it has assessed against the Borrower in order to facilitate a work-out or reinstatement of a delinquent account. Further the Bank may elect to waive late fees or charges to correct an account error or to promote customer good will.

6.10.4 Repurchase of Seriously Delinquent Loans. Unless the Bank has sought and obtained Agency approval for one or more of the workout provisions described above, the Bank is required to repurchase all loans within the fourth month of Borrower default. Following repurchase, the Bank is responsible for dealing with the mortgage and is not entitled to reimbursement from the Agency for losses or other costs associated with borrower default.

When payment records indicate that a Borrower's account is in arrears by three or more monthly payments, the Agency will issue a Repurchase Demand Letter. The Bank shall have 15 business days from the date of the Repurchase Demand Letter to remit the repurchase amount as described in Section 5.8. Repurchase demands issued as a result of loan delinquencies may not be appealed.

6.11 Other Servicing Functions

6.11.1 Prepayments. In case a loan payment exceeds the scheduled sum, the Bank should contact the Borrower to determine if the excess amount is intended to be applied to principal only or to principal and interest towards future payments. Until such instruction is received the funds are kept indisposed on the current (clearing) account of the Borrower. For adjustable rate loans or dollar denominated loans, prepayments applied to future interest may require future adjustment if the interest rate at the time the payment is actually due is higher or lower than the interest when received. If the amount of the prepayment is significant there are two options:

> **Renegotiation.** The amount of monthly payments provided by the initial schedule are recalculated, the terms of the loan repayment are reconsidered.
>
> **Reamortization.** Monthly loan payments can be recalculated without change of terms of repayment on mutual decision of the parties.

There is no prepayment fee for prepayment of the full amount of the debt, however 30 day notice is required by the Agency.

6.11.2 Assumptions. Loans used as collateral for Agency credits may be assumable at the discretion of the Bank. This provision should be clearly defined in the mortgage loan agreement with the Borrower. All assumptions must be approved in advance by the Bank. The new Borrower must qualify according to Bank and Agency guidelines. After the assumption, original copies of the new mortgage loan documents must be delivered to the Agency as custodian and the old mortgage agreement will be returned. The Agency reserves the right to re-underwrite all assumptions.

6.11.3 Property Inspections. The Bank is charged with the responsibility of protecting the collateral property from waste or abandonment. If during the term of the loan, the Bank has any reason to believe that the collateral property is in poor repair or has been abandoned, the Bank must conduct a property inspection and take steps necessary to cause the property to be repaired. A Mortgaged Property Survey Report, Form ___, must be submitted to the Agency in the event the survey requires the Bank to take action to enforce repairs. The report includes:

- General description of the property used as security for a mortgage loan
- Characteristics of the current condition of the property
- Estimated cost of its repair, if necessary
- Required terms within which repair shall be performed
- Assessment of the performed repair
- Price tendency on the local real estate market
- Statement of the current market price of the property
- Recommendations as to how keep the property safe and undamaged

If, as a result of the survey, it becomes clear that the property is in poor condition, the Bank shall have the right to demand that the Borrower repair the mortgaged property.

If the Borrower gives his consent to make a repair, the Bank shall agree to a completion date and arrange to re-inspect the property on that date.

If the Borrower gives his consent to make a repair, but cannot to fund it, the Bank, upon rating the changes in the Borrower's solvency, may accommodate him with a targeted short-term (6 months) consumer loan to perform a repair. The Bank must get the consent of the Agency prior to extending the loan.

If the Borrower refuses to perform a required repair, the Bank shall have the right to demand prepayment of a loan obligation; if the Borrower fails to meet the obligation before the deadline, the Bank shall have the right to foreclose the mortgaged property.

6.12 Servicing Adjustable Rate Mortgages

To service mortgage loans with adjustable interest rates, the servicing staff must review the mortgage loan agreement to determine the:

- Frequency of adjusting interest rates with indication of the date of its adjustment
- Banking index to be used when an interest rate is adjusted
- Dates of adjustments
- Restrictions (if applicable) for interest rate adjustment: maximum rate of increase within a year and within the whole period

The servicing staff must be aware of any changes in the index or other terms announced from time to time by the Agency, and apply those new requirements to loans serviced for the Agency when consistent with the terms of the mortgage loan agreement. When servicing mortgage loans with adjustable interest rates, the Bank shall notify the Borrower not later than 30 days prior to introducing an adjusted interest rate on the following:

- Amount of the adjusted interest rate
- The date when this rate will be effective
- Amount of the adjusted monthly loan payment and the date when it will be effective
- Explanation of the technique of adjustment of interest rate and monthly payments

6.13 Loan Accounting

Mortgage lending accounting shall be performed in compliance with effective rules and requirements.

6.13.1 Loan Account Procedures. Debts on mortgage loans shall be posted to Account No 716 “Consumer Loans for Individuals”. Interest shall be posted to the following accounts:

- 943 “Future Income”
- 960 “Operating and Other Expenses”
- 904 “Other Debtors and Lenders”

Interest shall be computed on the basis of an interest pay sheet executed and furnished by the Bank Lending Department according to the following standard form:

Borrower’s full name ~
Loan agreement No~
Scheduled date of interest to be added~
Interest period~
Amount of interest due, $~

Example:
Ignatiev Vladimir Petrovich
K10647
05/01/97
04/01/97 - 05/01/97
333

Mortgage lending accounting transactions shall be posted in the following way:

Accounting Transaction~
Debit~
Credit~

Examples:

Disbursement of a mortgage loan for a purchase of an apartment
No 716 "Consumer Loans for Individuals"
No 031 "Cashier's office of a commercial/cooperative Bank" (if a loan is disbursed in cash by a Bank Cashier's office)
No 161 "Correspondence ruble accounts of Russian commercial Banks, of other lending agencies of the RF Central Bank institutions" (if disbursed by written order)

Interest adding
904 "Other Debtors and Lenders"
943 "Future Income"

Receipt of a Borrower's loan payment
No 031 "Cashier's office of a commercial/cooperative Bank" (if money is paid in cash to a Bank Cashier's office)
No 161 "Correspondence ruble accounts of Russian commercial Banks, other lending agencies of the RF Central Bank institutions" (if money is paid by written order)
No 716 "Consumer Loans for Individuals" (repayment of principal)
904 "Other Debtors and Lenders" (payment of interest)

Appropriation of interest receipts to the Bank income
943 "Future Income"
960 "Operating and Other Expenses" (to be entered to an appropriate personal account of the Borrower by a separate entry)

To exercise day-to-day control and apply appropriate remedies in case of delinquency, it is necessary to keep a file of principal payments and interest added and paid.

To record securities for mortgage loans, the Lending Department shall keep a Record of Mortgaged Property, Form ____.

6.13.2 Interest Calculations. Mortgage loan payments are calculated by the method of annuity payments. Time annuity is a cash flow with equal amounts of payments made during a fixed period of time. Payments are made at the end of equal time intervals. To calculate loan payments the following formula is used:

$$R = \frac{P \times r}{1-(1+r)^{-n}}$$

with

R - Monthly loan payment
P - The amount of mortgage loan
n - Total number of loan payments for the whole loan period (in months)
r - Loan interest rate per month

For the purpose of analysis, or at the request of the Borrower, the balance of the main sum of the loan for any month of the loan terms is calculated. The following formula is used in the calculations:

$$Pt = R \times \frac{1-(1+r)^{-t}}{r}$$

with

Pt - The debt balance by the end of the t period
R - Monthly payment
t - Number of payments that should be made by the end of the loan terms (in months)
r - Loan interest rate per month

6.14 Minimum Servicing Requirements

While the Agency expects each Bank to adhere to the servicing standards detailed above, the following list represents minimum requirements for servicing mortgages loans.

6.14.1 Staff Capacity. The Bank warrants that is adequately staffed to provide the level of servicing identified in the Guide and that the staff are adequately trained and supervised.

6.14.2 Written Policies and Procedures. The Bank must maintain written policies and procedures for the mortgage loan servicing function.

6.14.3 File Maintenance. Complete loan files will be maintained in an orderly and safe facility and access to the files will be provided to the Agency upon request.

6.14.4 Collections. The Bank will collect from the Borrower and remit to the Agency monthly such amounts that are due from and to each.

6.14.5 Escrow Administration. The Bank will protect the Agency's interest in the collateral property by establishing escrow accounts for the deposit of funds paid monthly by the Borrower for property taxes and hazard, life and disability insurance. The Bank will ensure that these expenses are paid on a timely basis, whether or not funds paid by the Borrower are sufficient to cover the charge.

6.14.6 Delinquent Collections. The Bank will make every effort to collect delinquent accounts and will utilize all appropriate loss mitigation options to avoid foreclosure of the loan. The Bank will obtain a property inspection of every delinquent property on or near the 45 day after the due date of the last payment. In the event the delinquency cannot be cured within 90 days of the due date of the last payment received, the Bank agrees to repurchase the loan.

6.14.7 Default Reporting. Concurrent with the monthly remittance, the Bank will submit a Delinquent Loan Report as described in Section 6.10.1.

6.14.8 Loan Modification. The Bank must obtain the written consent of the Agency prior to entering into any agreement which permanently changes the terms of the loan prior to the expiration of the original loan term.

6.14.9 Assumption. The Bank must obtain the written consent of the Agency prior to approving a loan assumption by a new buyer.

6.14.10 Early Payoff. The Bank must provide the Agency with 30 days written notice in advance of a payoff prior to the normal expiration of the loan term.

7. REPORTING REQUIREMENTS

Throughout this Guide the Agency has identified a variety of reports which must be provided by the Bank in compliance with its Mortgage Selling and Servicing Agreement with the Agency. This Chapter identifies all such reports and the dates or frequency with which they must be delivered.

REPORT~
DUE DATE OR FREQUENCY

7.1 Loan Delivery

___ day of each month

7.2 Servicing

____ day of each month

7.3 Custodial Accounting

7.4 Remittance

____ day of each month

7.5 Maintaining Eligibility

Monthly Financial Reporting:

- Recertification Documentation
- Copies of the most recent annual report made to the Central Bank
- Year-end financial statements for the most recent two years, certified by an independent public accountant including all attachments and supporting notes
- Balance sheet certified by tax inspection
- Mandatory economic normatives
- Breakdown of certain balance and no-balance accounts (debtors and creditors, guarantee and sureties)
- Loan portfolio analysis with a breakdown according to terms, sectors of economy, and collateral type
- Net outstanding debt under loan, including total overdue debt obligations
- Equity flow
- Report on loans sold to the Agency

___ day of each month

7.6 Other

- Any problems experienced with Agency programs or guidelines
- Any suggestions for improvements to Agency operations
- Any reports, documents or files requested by the Agency from time to time
- As necessary, or within five business days of the request

8. CUSTODIAL ACCOUNTING AND REMITTANCE

This Chapter discusses the different accounting functions that relate to the financial aspects of servicing mortgages. These functions are continuing processes from the time a mortgage is sold to the Agency until it is paid off, or repurchased. The Chapter describes requirements for maintenance and accounting of custodial accounts, for the deposit of funds collected on behalf of the Agency, as well as procedures for delivering those funds to the Agency when due.

8.1 Custodial Bank Accounts

The Bank must establish and maintain separate custodial bank accounts for funds it collects on behalf of the Agency (principal and interest), or collects on behalf of Borrowers whose loans have been sold to the Agency (taxes, insurance or other escrowed payments).

The Bank is responsible for the safekeeping of custodial funds at all time and will be responsible for any loss of funds deposited in a custodial account, even if the Bank has complied with all of the requirements of this Chapter. The Bank may earn interest on amounts deposited in custodial accounts but should deduct the interest monthly prior to remittance reporting.

8.1.1 Eligible Custodial Banks. ***(What is the criteria? May Banks hold their own custodial accounts?)*** The Agency reserves the right to approve or disapprove eligibility of depository institutions.

8.1.2 Establishing Custodial Accounts. The Bank and the depository institution selected to hold the custodial accounts must execute a separate *Letter of Authorization*, Form _____, for each such account. The original *Letter of Authorization* must be sent to the Agency and copies retained by the Bank(s).

A separate custodial account must be maintained for deposit of principal and interest payments ("P&I") and for deposit of tax, insurance or other escrowed funds ("T&I"). Under no circumstances may P&I and T&I funds be co-mingled in the same custodial account. The Bank may, for its convenience, maintain a larger number of custodial accounts.

Custodial accounts for deposit of P&I funds must be titled as follows:

(Name of Bank), as agent, trustee and bailee for the Russian Federation of Housing Mortgage Finance and/or payments of various Borrowers and or owners of interest in mortgages or mortgage backed securities (Custodial Account)

Custodial accounts for deposit of T&I funds must be titled as follows:

(Name of Bank), as agent and trustee for the Russian Federation of Housing Mortgage Finance and/or payments of various Borrowers respectively (Custodial Account)

8.1.3 P&I Accounts. Funds deposited in the P&I custodial account must relate to mortgage principal and interest payments due to the Agency, whether they are collected from the Borrower, advanced by the Bank to cover a scheduled payment, or result from a full or partial payoff of the loan or proceeds from a third party foreclosure, or pre-foreclosure sale.

It is preferable that only the portion of the Borrower's payment due to the Agency be deposited in the P&I custodial account. However, if the Bank does not maintain a clearing account, the Agency will permit the entire P&I payment to be deposited as long as that portion not due to the Agency (servicing fees, late fees etc.) is withdrawn before the remittance due date.

The Bank should also deposit into the P&I custodial account other funds that are due for remittance to the Agency including, but not limited to, commitment fees, pair-off fees, document custody fees ***(if these are to be charged)***, and other fees or penalties assessed by the Agency.

The Bank may withdraw funds from the P&I custodial account only for the following purposes:

- To remit funds due to the Agency on the remittance due date
- To reimburse itself for delinquency advances subsequently recovered from collections
- To remove amounts deposited in error
- To terminate the account

8.1.4 T&I Accounts. Funds deposited in T&I custodial accounts may only originate from:

- Deposits collected from the Borrower for payment of taxes, insurance or other escrowed expenses
- Advances made by the Bank for these purposes
- Funds advanced or reimbursed for servicing related costs including foreclosure expenses, recording fees, etc.
- Payments being held as "unapplied" pending determination of their proper application (partial payments, insurance loss drafts, etc.)

All disbursements related to escrowed obligations must be made from the T&I account. If a disbursement creates an overdraft in any Borrower's T&I account the servicer must advance its own funds-by the end of the accounting period-to cure the overdraft. Any funds the Bank advances must stay in the T&I custodial account until the Borrower remits funds to cure the overdraft. ***(is the end of the accounting period the same as the remittance due date?, if not we have not yet defined this term)***

The Bank may withdraw funds from the T&I custodial account only for the following purposes:

- To pay the Borrower's taxes, insurance or other escrowed expenses when they are due
- To refund escrow account surpluses to the Borrower

- To reimburse itself for servicing advances subsequently recovered from collections
- To remove amounts deposited in error
- To terminate the account

8.1.5 Timing of Deposits. All funds related to P&I or T&I payments that are received from a Borrower must be credited to the appropriate custodial account by the next business day after receipt, or the second business day after receipt if a cleaning account is utilized. The Bank may establish a reasonable daily cut-off of its work to ensure that collections are promptly credited to the proper account.

Funds that are not received from the Borrower, but are scheduled delinquent advances to the Agency, or fees or charges owed to the Agency by the Bank, must be deposited in the appropriate custodial account before the scheduled remittance due date. ***(or end of the accounting period?)***

8.1.6 Clearing Accounts. If it is inconvenient for the Bank to make deposits and disbursements directly to custodial accounts, clearing account may be used. Funds received from, or on behalf of, a Borrower must be deposited to the cleaning account within one business day of receipt. The portion of such deposits due to the Agency or to a Borrower escrow account must be transferred from the clearing account to the appropriate custodial account within two business days of initial receipt of the funds by the Bank.

Adequate records and audit trails must be maintained to support all credits to, and charges from the Borrower's payment records and the clearing accounts.

(Are there limits on where these clearing accounts can be, or can they be part of the Bank's General Ledger system?)

8.1.7 Reconciling Custodial Accounts. Each month the Bank must reconcile its cash book to the custodial accounts using the *Custodial Account Analysis*, Form ____. Each custodial account must be reconciled separately. The Bank must retain each month's reconciliations in its records. ***(Do these need to be delivered monthly, annually or only upon request?)***

8.2 Remittances

Banks will remit all funds due to the Agency on a monthly basis. The remittance amount will be calculated based on principal, interest, fees and other charges accrued through the accounting cut-off date. Unless otherwise negotiated in the Agreement or Master Commitment, the accounting cut-off date is the ______ calendar day of each month.

Each remittance must be accompanied by a *Loan Activity Record*, Form _____, detailing all loan collection activity for the preceding month. Included on the loan activity report will be "scheduled" principal and interest; unscheduled principal received from the Borrower; special remittances such as repurchase proceeds; and other fees and charges.

Each Bank will submit only one *Loan Activity Record* and one monthly remittance regardless of the number and variety of loans sold to the Agency. Remittance may be made by wire transfer or _______? ***(What other means or payment are acceptable? Will the Agency be able to draft directly from the custodial accounts?)***

8.2.1 Remittance Due Date. The Bank must deliver all funds due to the Agency by the _____ day calendar day of each month, or the preceding business day if the ____ is not a business day. Funds must be actually received by the Agency ***(or available for drafting???)*** by the remittance date. Funds remitted via wire transfer must be received by the Agency no later than _____ p.m.

8.2.2 Loan Activity Record. ***(What will this look like, how and when shall it be delivered?)***

8.2.3 P&I Remittances. The P&I remittance includes "scheduled" principal and interest due on or before the cut off date , whether or not it was collected from the Borrower, as well as "unscheduled" principal collected from Borrowers prior to the cut-off date. The Bank must deduct from the total amount received from the Borrower the Bank's servicing fee and any late fees or servicing charges paid by the Borrower that accrue to the Bank.

8.2.4 Special Remittances. Special remittances include additional funds that are due the Agency for a specific purpose related to an individual loan. Examples of special remittances include repurchase proceeds, insurance premium refunds, or other settlements.

If a *Repurchase Demand Letter* was issued by the Agency more the 15 days prior to the accounting cut-off date, the Bank must remit the repurchase price by the remittance due date unless a written appeal has been delivered to the Agency and a review of the repurchase request is pending.

8.2.5 Remitting Other Fees and Charges. All other fees and charges due to the Agency as of the accounting cut-off date, such as commitment fees, pair-off fees, document custody fees and penalties which have been assessed by the Agency, must be deposited in the P&I custody account and available for wire transfer or other delivery on or before the remittance due date.

8.2.6 Wire Transfer Instructions. The amount of the wire transfer must correspond to the total amount shown on the *Loan Activity Record* for that month. The Bank must wire transfer the monthly remittance in Rubles to the Agency's account with _____________ Bank, identifying the wire as follows:

Agency name
Account numbers
Participating Bank, Agency ID number

8.2.7 Other Forms of Delivery???

8.2.8 Late Delivery. If for any reason the Bank cannot effect delivery of the monthly remittance by its due date, the Bank must immediately notify the Agency by telephoning ____________________. The Bank must describe all of the circumstances and conditions preventing it from remitting on time. The Agency reserves the right to charge the Bank a penalty fee on the amount of any monthly remittance received after the due date.

8.3 Monthly Remittance Reconciliation

Following receipt of remittances from Participating Banks, the Agency will review the information contained in each Banks' *Loan Activity Record* and reconcile the amount received against Agency records. The Agency will issue an *Error Report,* Form _____, to each Bank indicating any discrepancies identified in the reconciliation. ***(Any idea what this process should look like? Form of report, dates etc. Will it just include an error report or also a confirmation of all funds received and how they were applied?)***

8.3.1 Error Reporting. The Agency will issue the *Error Report,* by the ____ business day of each month for delivery to Participating Banks via _______ ***(what means, mail, fax?).*** All Banks will receive an *Error Report,* even if no discrepancies are found.

8.3.2 Bank Reconciliation. Each month the Bank must reconcile the information provided on the *Error Report* with its internal records within ____ business days of receipt. If the Bank disagrees with the information in the *Error Report* ***(What do they do?)***

8.3.3 Shortages. A shortage is the difference between the cash the Bank remitted to the Agency and the amount of principal, interest, special remittance and other fees due to the Agency as indicated on the *Error Report*. If the Bank cannot reconcile a shortage it must remit the amount of the unreconciled shortage ***(When, How? Is there a penalty for failure to remit, is there an appeal process?)***

8.3.4 Over Payments. When the *Error Report* indicates that the Bank has remitted more funds than it owes to the Agency, the Bank must promptly reconcile the *Error Report* against its own records and submit a written, documented claim for a refund if justified. The Agency will refund the over payment as soon as it verifies the over payment. The Agency will not pay interest on any funds remitted in error by a Bank.

If the over-remittance involves a large number of mortgages, the Agency may require that the Bank engage an independent certified public accountant to review the claim and certify that it is accurate.

8.3.5 Correcting Non-Financial Errors. If the Agency's reconciliation process identifies loan data, loan status or other information reported by the Bank that does not correspond to information maintained by the Agency, such discrepancies will be noted on the *Error Report.* The Bank must research all noted discrepancies and respond in writing to the Agency by ________ ***(When?).***

9. FORMS

FORM NAME	FORM NUMBER	GUIDE REFERENCE
Annual Mortgage Loan Report	1	6.9.5
Borrower Income Report		4.5.5
Custodial Account Analysis		8.1.7
Delinquent Loan Report		6.10.1
Error Report		8.3.2
Escrow Accounting Verification		5.3
Escrow Disbursement Statement	2	6.9.5
Housing Mortgage Loan Application		4.3
Letter of Authorization		8.1.2
Loan Activity Record		8.2
Loan Closing Statement		5.3
Loan Delivery Schedule		5.4.5
Loan Funding Accounting Statement		5.3
Loan Purchase Confirmation & Settlement Notice		5.5.3
Mortgage Loan Amortization Schedule	5	?
Mortgaged Property Survey Report	4	6.10
Preliminary Verification of Borrower's Financial Standing		4.2
Record of Mortgaged Property	3	6.13.1
Repurchase Demand Letter		5.8.1
Request for Documents		5.7.1
Request for Information - Bank		4.4
Request for Information - Employment		4.4
Request for Information - State Tax		4.4
Residential Appraisal - Society of Appraisers form		4.10.2
Total Collections and Calculation of Agency Remittance Amount		7.3
Underwriting Statement		4.14
Verification of Loan and Payment History		4.9.1

NOTES ON LENDER ELIGIBILITY

SYSTEMS PLAN FOR THE RUSSIAN FEDERATION AGENCY FOR HOUSING MORTGAGE LENDING

PHASE I: IDENTIFICATION OF AUTOMATION TARGETS

SYSTEMS PLAN FOR THE RUSSIAN FEDERATION AGENCY FOR HOUSING MORTGAGE LENDING

PHASE I: IDENTIFICATION OF AUTOMATION TARGETS

MANAGEMENT SUMMARY

This report is the result of the first phase of developing a systems plan for the Russian Federation Agency for Housing Mortgage Lending.

The objectives of this phase were to:

Present a process for developing a systems plan.

Identify the major agency business processes and functions.

Target business functions for automation to include the timeframe, types of data, rules, analytics, processors, and performance managers required to implement each system.

Collect information regarding current lender mortgage processes and systems.

These objectives were achieved through detailed conversations with Institute staff (primarily Sasha and Dima) and the chief of data processing from a local Moscow bank, and are documented in this report.

The section entitled “Process Automation Targets, Timeframes and Requirements” identifies the business functions that, in the opinion of the author, must be automated prior to purchasing the first loan. It is anticipated that these initial systems will be very basic in terms of both design and functionality in order to meet the extremely aggressive timeline. It is also anticipated that these initial systems will have a lifespan of 1-2 years after which they will either require substantial enhancements or rewrites in order to meet more robust business requirements as the Agency's business volumes increase.

The timeframes for developing the required systems to support loan purchases in 1997 is extremely aggressive and will be difficult to meet without a fast, focused and sustained effort to: define the detailed system specifications; select the development platforms and tools; identify the development team, albeit Agency staff and/or contractors; and commence the development and thorough testing of the required systems.

It is recommended that all the systems identified as "critical" in 1997 be completed and thoroughly tested at least 30 days prior to purchasing the first loan. Failure to do so will substantially increase the risk of business mismanagement, fraud and ultimate business failure.

MISSION AND BUSINESS OBJECTIVES

The mission of the Russian Federation Agency for Housing Mortgage Lending (“Agency”) is to make it possible for banks to extend housing loans for the purpose of improving housing and increasing home ownership in Russia.

The business objectives for the Agency are:

To create a secondary mortgage market for Russia

To provide a reliable source of mortgage funds for banks

To generate profits to sustain and grow business operations and attract and reward investors

Commence business operations and purchase first loans in 1997

Comply with all applicable regulatory requirements

AGENCY INFRASTRUCTURE

Business Infrastructure

The Agency will be headquartered in Moscow. The major business functions will be to: purchase loans; perform loan lifecycle management; sell bonds; service bonds; manage credit and interest rate risk.

Initial funding for the Agency will come from the Russian Federal Government, which will own all interests in the Agency. Subsequent funding will come through the issuance of government-backed bonds to investors (Russian banks, international investors, etc.). Ultimately it is envisioned that interest shares in the Agency may be sold to banks and other investors.

The Agency regulator is the Russian Central Bank. The Agency will be required to deliver Asset/Liability Reports to the Central Bank on a daily and monthly basis.

Initially the Agency will conduct business with a small number of Moscow banks, concentrating on mortgages from the local area. Over time it is envisioned that Agency customers will include most major Russian banks and will purchase mortgages from major urban areas throughout the country.

Projected Agency loan purchase volumes are as follows:

Year	Number of Loans	Average Loan Size	Total $UPB Purchased
1997	TBD	TBD	TBD
1998	3,000	30,000	$ 90,000,000
1999	10,000	35,000	350,000,000
2000	15,000	40,000	600,000,000
2001	25,000	45,000	$1,125,000,000

Current Systems Infrastructure

Since the Agency does not yet exist, there is no existing systems infrastructure. It is possible that some amount of equipment may be provided from the Institute for Urban Economics inventory of standalone 486/586 PC's.

Staff Members

Agency staffing is envisioned as follows:

Year	Managers	Specialists	Generalists	Totals
1997				10
1998	12	14	14	40
1999	14	28	28	70
2000	15	40	45	100

KEY BUSINESS PROCESSES

Loan Purchase Process

It is envisioned that the loan purchase process will work as follows:

> Banks will collect the loan application data, documents, get an appraisal, and perform underwriting.

The Agency will re-underwrite each loan file. This may take place at the bank office and may include a physical inspection of the property, a meeting with the borrower, and any other precautionary actions deemed necessary.

The Agency will maintain a database of all loans underwritten to begin to develop statistics regarding each banks submissions.

After underwriting, if the Agency approves the loan, they will inform the bank, enter the loan into the Agency's loan management system, and process payment for the loan through the Central Bank.

The bank will receive payment, enter the new loan into their loan servicing system, and begin the servicing process.

If after underwriting the Agency declines to purchase the loan, they will hold follow-up discussions with the bank to explain their decision and discuss any potential cures.

Loan Lifecycle Management Process

It is envisioned that the loan servicing and investor reporting process will work as follows:

The borrower either makes their loan payment at their local bank branch or by automatic payroll/bank account deduction.

The bank enters the payment into their servicing system.

On the designated day, the bank prepares wire transfer instructions for the Central Bank to wire the aggregated loan payments (less servicing fees, etc.) to the Agency. The bank also submits a loan servicing report to the Agency showing all loan activity and payments for the time period.

The Central Bank makes the transfer and credits the Agency's account with the loan payments.

The Agency compares the bank loan activity report and the amount of money credited to their Central Bank account with their own internally calculated payment projections.

If discrepancies are found, the Agency will request that the bank investigate and resolve them.

Bond Issuance Process

It is envision that the bond issuance process will work as follows:

Each year the Agency will receive approval from the Russian Federal Government to issue a set amount of bonds.

Based on pipeline needs and other capital requirements, the Agency will periodically create and issue bonds.

As a first step, the Agency will identify a set of loans from portfolio to be associated with the bond. While the bond is backed by the Russian Federation Government and not the underlying loans, the Agency wishes to tie cash flows to bonds both as a cash management tool and as practice for later issuing mortgage backed securities.

Next the Agency will prepare a prospectus for the bond and send it to the Central Bank and/or the Security Commission for review and approval.

If approved by the reviewing agencies, the Agency will pay the bond issuance tax, add to the Agency's loss reserve, and request that a selected partner bank register the bond.

The partner bank will then place the bond with a private investor, initially probably another bank or a foreign investor.

The investor pays the partner bank who in turns credits the Agency's Central Bank account.

It is hoped that at some point the Moscow International Currency Exchange will create a secondary market for Agency bonds to increase their liquidity.

Bond Servicing Process

It is envisioned that the bond servicing process will work as follows:

On an ongoing basis, the Agency will calculate projected bond payments as specified by the bond prospectus. Again it should be noted that bond payments are guaranteed and are not dependent on any underlying loans.

On the specified date, the Agency will effect a wire transfer payment through the Central Bank to the investor.

If an "associated" loan goes into default or prepays, the selling bank will be required to either replace the loan or to pass through to the Agency the entire unpaid principal balance and all interest accrued since the loan became non-performing.

PROCESS AUTOMATION TARGETS, TIMEFRAMES AND REQUIREMENTS

The following charts identify the business process automation targets, timeframes and the data, rules, analytics, processors and performance managers required to support each process.

For the purposes of this report the following definitions apply:

Data. Repositories of the types of information, both at the granular level and at the aggregate level, required to support business processes and transactions.

Rules. Define and provide the rules and policies that govern how business will be conducted.

Analytics. Perform analysis, modelling, and simulation processing to support decision making.

Processors. Perform relatively standard transaction processing activities, with a minimum of exception handling or human intervention. Should be constructed to accommodate rapid growth in transaction volumes.

Performance Managers. Measure how well processes and transactions are performing against targets. Acts as a feedback mechanism for process improvement.

For years 1997 and 1998, critical processes that must be automated are indicated with a "C". It is recommended that all processes marked as "Critical" be completed prior to purchasing the first loan.

This section ends with a compilation of the data, rules, analytics, processors and performance managers required to support critical business applications in 1997 and in 1998.

unction	Process	97	98	99	00	0
ranchise anagement	Perform Consumer Outreach			X		
	Monitor and Meet Regulatory Requirements	C				
roduct anagement	Identify Market Needs					
	Develop and Implement Products			X		
	Monitor Product Performance	C				

ar for Initial Automation (Continued)

unction	Process	97	98	99	00	0
nancial anagement	Define Financial Targets	C				
	Set Pricing Parameters	C				

In the preceding charts, automation of the following business processes was identified as being "Critical". In the author's opinion, all systems required to support these "Critical" business processes in 1997 should be completed prior to purchasing the first loan. Systems identified as "Critical" in 1998 should be completed by the end of that year.

Listed below is a brief explanation of the type of automation envisioned by the author for each of the business processes identified as "Critical" for 1997 and 1998.

Monitor and Meet Regulatory Requirements - Required in 1997

– *Objective:* Produce financial reports to meet regulatory requirements.
– *Automation Requirement:* It is probable that the reports will be produced utilizing data from the general ledger. These reports may actually be produced using a spreadsheet.

Monitor Product Performance - Required in 1997

– *Objective:* To monitor the performance of each mortgage product.
– *Automation Requirement:* The development of a Product Performance Manager. This may initially take the form of a report that tracks delinquencies (30, 60, 90 days), repurchases, and foreclosures by product.

Define Financial Targets - Required in 1997

– *Objective:* To set Agency financial objectives and define methods for obtaining targets.
– *Automation Requirements:* At a minimum, this will entail the development of an analytic that enables Agency management to evaluate alternative strategies (loan purchase volumes, product mix, bond

issuance, etc.) to achieve Agency financial goals. Ultimately it will include a broad set of analytics to include: Interest Rate Risk; Prepayment Risk; and Asset/Liability Matching.

Set Pricing Parameters - Required in 1997

- *Objective:* To define pricing guidelines for products based on an understanding of the product characteristics and market needs.
- *Automation Requirements*: At a minimum, this will entail a spreadsheet that enables Agency management to enter variables (projected interest rates**;** projected prepayment; required margins, etc.) to calculate prices for each product. This may later be expanded to incorporate credit risk and other parameters.

Monitor Financial Performance - Required in 1997

- *Objective:* To track all financial targets (e.g., return, cost, capital adequacy) required to measure Agency performance and assess forecasts.
- *Automation Requirements:* This will entail the development of a Financial Performance Manager that tracks actual financial performance against set targets in all key financial areas and highlights variances.

Analyze/Select Credit Risk - Required by end of 1998

- *Objective*: To review and approve all credit risks (e.g., counterparties, products) according to credit policies.
- *Automation Requirements:* The development of a Credit Risk Evaluation Analytic that enables Agency management to assign risk factors to all aspects of deals, products and alternative investments in order to knowledgeably and effectively manage Agency credit risk.

Monitor Credit Risk Strategy - Required in 1997

- *Objective:* To assess credit performance, examine conformance/non-conformance to policy on an ongoing basis, and to assess effectiveness of credit risk strategy.
- *Automation Requirements:* The development of a Credit Risk Performance Manager that enables Agency management to evaluate the effectiveness of discrete credit risk policies, track conformance/non-conformance with these policies, and assess the overall credit risk of all Agency assets.

Define Interest Rate Risk Strategy - Required in 1997

- *Objective:* To define a comprehensive interest rate risk strategy to meet changing Agency business objectives and/or resolve inadequacies in existing strategy.
- *Automation Requirements:* The development of a Portfolio Performance Manager, an Interest Rate Risk Analytic, and a Prepayment Risk Analytic to enable Agency management to project and assess the potential impact of interest rate movement on loan purchases, loan performance, payoffs, etc.

Define Lender Eligibility Strategy - Required in 1997

- *Objective:* To define a comprehensive partner strategy to meet changing business needs and to resolve inadequacies in the existing strategy.
- *Automation Requirements:* The development of a Lender Evaluation Model which forecasts lender performance based on underlying attributes such as total assets, mortgage experience, projected volumes, assessment of credit risk, etc.

Select and Maintain Lenders - Required in 1997

- *Objective:* To review, select, and maintain individual partners according to overall partner strategy.
- *Automation Requirements:* Use of the aforementioned Lender Evaluation Model to quantitatively assess candidate lenders.

Monitor Lender Performance - Required in 1997

- *Objective:* To track and evaluate the performance of approved lenders in order to identify and take corrective actions as necessary.
- *Automation Requirements:* Development of a Lender Performance Manager to quantify lender performance, compare performance across lenders, and identify lenders that require corrective action. Requires an approved lender database.

Monitor Lender Eligibility Strategy - Required in 1997

- *Objective:* To track the effectiveness of the overall lender eligibility and selection strategy.
- *Automation Requirement:* Refinement of the Lender Evaluation Model based on actual performance data from the Lender Performance Manager to improve effectiveness of the model and future lender approvals.

Monitor Conformance with Deal Terms - Required in 1997

- *Objective:* To monitor lender conformance/non-conformance with deal terms in order to minimize credit risk and evaluate lender performance.
- *Automation Requirement:* Development of a Deal Performance Manager that measures actual loan purchase and document custody characteristics against deal terms and highlights variances.

Purchase Loans - Required by end of 1998

- *Objective:* To automate the process of validating loan purchases in terms of their compliance to product parameters, deal parameters, and selected underwriting guidelines.
- *Automation Requirement:* Develop a Loan Purchase Processor that accepts automated loan purchase data; validates deal, product and selected underwriting parameters; either approves, rejects with explanation, or refers to a loan purchase analyst for further review; and produces reports documenting all loan purchase activity. Also develop a Document Certification/Custody Processor that captures information to insure compliance with all loan purchase document requirements and maintains the location said documents for all purchased loans. Also develop a Loan Payment Processor that calculates loan payments to lenders based loans purchased and contract parameters.

Insure Compliance with Product Parameters - Required by end of 1998

- *Objective:* To insure that all loans purchased comply with Agency product parameters.
- *Automation Requirement:* This feature should be incorporated into the aforementioned Loan Purchase Processor.

Manage Document Custody - Required in 1997

- *Objective:* To insure compliance with all document custody requirements and to measure lender performance relative to these requirements.
- *Automation Requirements:* Development of the aforementioned Document Certification/Custody Processor and also development of a Document Performance Manager that measures performance by lender and by product type.

Loan Management (Servicing) - Required in 1997

- *Objective:* To insure that lenders are servicing all loans properly, that the Agency is receiving all loan payments, and to track portfolio, lender, product and loan performance.
- *Automation Requirement:* Development of a Loan Management Processor that maintains detailed data on all purchased loans, calculates expected payments, accepts lender actual payments, highlights differences for resolution, and produces management reports to track portfolio, lender, product, loan and payment performance.

Manage Pipeline - Required in 1997

- *Objective:* To manage the issuance of Agency bonds based on projected loan purchase volumes, loan servicing payments, bond servicing payments, and other cash-dependent Agency activities.
- *Automation Requirement:* Development of a Pipeline Management Model that forecasts bonds issuance requirements based on projected cash needs for loan purchases, loan servicing payments, bond servicing payments, etc.

Create/Issue Bonds - Required in 1998 prior to issuance of first bond

- *Objective:* To manage the process of creating and issuing bonds to include the identification of associated loans, asset liability matching, and prepayment risk.
- *Automation Requirement:* This will require the development of a number of analytics to include: Underlying Asset Model to identify/tag portfolio loans to be associated with a specific bond that support discrete bond requirements; Asset/Liability Matching Model to match bond maturity with anticipated maturity/lifecycle of associated loans; Interest Rate Risk Model to calculate impact of interest rate changes on portfolio holdings; Loan Prepayment Model to project loan prepayment for loans associated with bonds.

Service Bonds - Required in 1998 prior to issuance of first bond

- *Objective:* To manage the process of making all bond payments and any associated tax payments.
- *Automation Requirement*: Development of a Bond Payment Processor that calculates all bond payments and produces management reports. Also development of a Tax Processor to calculate all associated tax payments and produce management reports.

Define Cash Position - Required in 1997

- *Objective:* To identify a cash strategy that maximizes return and meets Agency objectives.
- *Automation Requirement:* Development of a Cash Performance Manager that calculates current cash position, projects future cash requirements, and evaluates alternative investment opportunities. Will incorporate output from the Interest Rate Risk Model.

Monitor Cash Position and Select Short Term Investment Opportunities - Required in 1997

- *Objectives:* To monitor cash position and select optimal investment opportunities.
- *Automation Requirement:* Use of aforementioned Cash Performance Manager to monitor current cash position, project cash requirements, and evaluate alternative investment opportunities.

Settle Cash Transactions - Required in 1997

- *Objective:* To correctly calculate and settle all expected and projected incoming/outgoing cash transactions.
- *Automation Requirement:* Development of a Cash Transaction Clearinghouse Processor to calculate and aggregate all incoming/outgoing cash transactions and produce associated management reports.

Service Lenders - Required by end of 1998

- *Objective:* To respond to lender inquiries regarding deals, purchases and payments, and performance.
- *Automation Requirement:* To provide access to summary and detailed data and reports that accurately depict a lender's total business relationship with the Agency. This may be accomplished through standard reports run against data extracts so as not to impact daily production processing, or through access to the relevant performance managers.

Administer Agency Cash Flow - Required in 1997

- *Objective:* To aggregate all Agency cash transactions for management review to insure that all transactions are valid and correct.
- *Automation Requirement:* Development of a Cash Flow Management Processor that aggregates all incoming/outgoing cash transactions and provides both summary and detailed management reports. It is envisioned that in 1997 the system will only deal with the aggregation function, and may later be expanded to include a wire transfer function.

Settle Agency Books - Required in 1997

- *Objective:* To insure that all agency accounts are correctly calculated and settled on the required basis.
- *Automation Requirement:* Development of an Agency General Ledger

System and Settlement Processor.

LENDER PROCESS AND SYSTEMS REVIEW

On Thursday, June 26, 1997 I interviewed Ivan Alekseevyeh. Ivan is responsible for all aspects of systems for Master Bank. Master Bank is a three-year old bank with one office in Moscow and has a staff of approximately 500. At the end of 1996 Master Bank was the 36th largest bank in Russia (assets).

Regulator

The Russian Central Bank is the regulator for all Russian banks, however, it does not currently regulate mortgage lending activity. All banks (and the Agency) must deliver daily and monthly asset/liability and cash position reports to the Central Bank. At Master Bank, mortgage lending appears as a single line item on the monthly report, and does not appear on the daily reports.

Mortgage Lending and Systems

Master Bank is not actively engaged in mortgage lending. The few mortgages transactions that have been made have only been made to “special” customers and were made as a standard loan, requiring substantial collateral. Ivan said that no real underwriting was done, simple an assessment of whether the “valued customer” would repay the loan. Ivan mentioned that sometimes the bank “makes mistakes” and when this occurs finds it virtually impossible to recover any of the assets, in one case $.20 on the dollar after two years in court. There has been some discussion of developing a credit risk model, however, nothing has been done to date. Ivan said that there is a small database for mortgages, however, it only consists of approximately 20 data elements. All payment processing is done in the banks primary processing system, written in Oracle, treating the mortgage as any other loan. Ivan said that he does produce a management report that tracks payments for mortgages as well as other loans.

Bank Systems Architecture

Master Bank utilizes a variety of platforms and software. They run a client-server, LAN environment. The Database Servers run SCO Unix and the major server applications are developed in Oracle. The application servers run Windows NT and major server software includes: Windows 3.1; Word; Excel; Oracle Forms; Delphi; and TCPIP. There is a Novel LAN, however, may of the PC’s run standalone. There are approximately 200 PC workstations in the bank running under one of three operating systems: DOS, Windows 3.1, Windows 95. Standard workstation software includes: Windows 3.1; Word; Excel. Master

Bank utilizes SWIFT for international wire transfers and Reuters for it's international trading system.

Telecommunications

Master Bank utilizes a mixture of leased lines and straight modem dial-up for its telecommunications. Some transmissions to the Central Bank are through a leased line to a service provider that provides a frame relay circuit to the Russian Central Bank. Other transmissions to the Central Bank and other banks use a combination of leased lines and modems. Regarding dial-up reliability, Ivan summarized it by saying: 70 percent of the time there were no problems; 20 percent there we some problems; 10 percent it just did not work. Communication speeds vary from 9600 baud to 19.2 for dial-up to 64K leased lines.

Bank Applications

In general, Master Bank has found it necessary to develop all it's own systems. This is for two primary reasons: it is difficult and expensive to modify foreign systems to meet Russian accounting standards; there are no dominant Russian software providers. Ivan mentioned that last year Sberbank (the largest bank in Russia) launched a project to evaluate general ledger and banking software from IBM, Unisys and DEC. He reported that the results had not been successful, and that Sberbank was now developing it's own systems.

General Ledger

Originally, Master Bank used a purchased general ledger package called "Inversion". Inversion was written by a local software developer in Clipper approximately 4 years ago, and has been a popular system. Master Bank outgrew Inversion because it was unable to handle large transaction volumes. The supplier is currently in the process of rewriting Inversion as an Oracle client-server system. Master Bank currently uses a general ledger system called "Va-Bank" (the names means "Go Bank!) which is written in Oracle and produced by a local supplier named Forse. Ivan said Va-Bank also has it's problems, however, and that he has been searching unsuccessfully for a good general ledger package for two years. Ivan believes that he will eventually have to write a custom general ledger system for Master Bank. Ivan said that the most popular general ledger packages on the market are: Va-Bank (Oracle); Rs-Bank (Btrieve); Diasoft (Informix); Program Bank (Sybase or Microsoft SQL); and Inversion.

On-Line Transactions

Ivan said that "special" customers had the ability to dial-in and view their account balances using a Windows-based package. This is a view-only capability, however, and no transactions may be performed.

Programming Staff and Tools

Ivan has a staff of 10 programmers working for him which he said were very accomplished. The programmers are used as a resource pool from which Ivan assigns various bank programming requests based on who is available when the request comes in. The primary development tools are Oracle and Delphi.

Obstacles to Developing Mortgage Systems

Ivan said that a lack of business knowledge was the biggest impediment to developing mortgage systems. Very few business or systems people have ever worked with mortgage systems, so there would be a big learning curve for everyone involved. Another impediment is a complete lack of data standards. Ivan said that even today he had three different standards for reporting tax information, however, he was glad it was only three and not more. He feels that his staff can easily provide any data they have in any format the agency wants and sited as an example that the Central Bank issues report/data programming changes each month that must typically be completed within one week. The larger issue is whether Master Bank currently collects the data, however, for new loans forms and systems could be modified making this less of an issue.

Internet

Master Bank currently has a homepage (www.masterbank.ru), however, it is not currently used for any transactions. Ivan is currently discussing several internal, intranet applications to share viewing of various internal reports and data.

Opportunities for the Agency

Ivan said that if management decides to get into the mortgage business, he would welcome Agency-supplied training for his technical staff regarding the development of mortgage systems. Ivan was also open to purchasing loan delivery and monthly servicing reporting software from the Agency if it were proven to be reliable and cost-effective.

NEXT STEPS

I recommend that the following next steps be undertaken by the Institute staff:

Develop a detailed system specification for each of the business processes to be automated in 1997, focusing initially on those processes indicated as "Critical". The specifications should include:

- The criteria necessary to monitor the performance of the business functions
- The management reports that will be used to monitor performance
- The reports required by the Central Bank and any other regulators
- The rules that will be required to support each targeted business function
- The analytics that will be required to support each targeted business function
- The performance managers that will be required to support each targeted business function
- The functions, capabilities and workflows for all processors required to support each targeted business function
- The data required to support the performance managers, reports, rules, processors and analytics for each targeted business function

Identify the major systems integration firms that provide services in Moscow, especially those with banking/mortgage banking experience.

Working with bank contacts, identify a candidate general ledger system for the Agency to support operations for 1997 and 1998.

Develop criteria to evaluate systems integration firms.

These steps must be completed prior to beginning development of any systems. Ideally these steps will be completed prior to the commencement of Phase II in mid-August 1997.

While I was informed that in Russia that programmers develop systems requirements prior to commencing development, I recommend that the Institute staff develop at least a high-level set of systems requirements that identifies key functions, volumes, performance, etc. as a guide to selecting the most appropriate solution and systems integration firm.

Finally, from a systems perspective there are several issues that Institute management needs to be aware of:

System Develop Timeframes. The Agency faces a daunting challenge to develop the basic pricing, loan management, general ledger and other basic systems that are necessary to commence business operations.

It is also recommended that the Institute immediately dedicate staff and/or contractors to develop system specifications and commence development of these systems.

It is recommended that all systems marked "Critical" in 1997 should be completed and tested a minimum of 30 days *prior* to the date the loans are to be purchased. For example, if the Agency intends to purchase it's initial loans on December 29, 1997, then all critical systems needed to support the pricing, purchase and subsequent loan management functions should be completed, to include thorough testing, no later than November 28, 1997.

I recommend against starting business until all of the business processes indicated "Critical" in 1997 have been completed and thoroughly tested. The other 1997 systems should be completed as soon as possible thereafter.

Functionality and Lifespan of Initial Systems. It is anticipated that these initial systems will be very basic in terms of both design and functionality in order to meet the extremely aggressive timeline. It is also anticipated that these initial systems will have a lifespan of 1-2 years after which they will either require substantial enhancements or rewrites in order to meet more robust business requirements as the Agency's business volumes increase.

Central Bank Reporting Changes. If indeed the Agency will be required to meet Central Bank daily and monthly reporting requirements, and if the Central Bank changes its reporting requirements on a monthly basis as indicated during the Master Bank interview, this could become a significant drain on Agency resources to comply with the Central Bank mandated changes and should be closely monitored by Agency management.

INITIAL SOFTWARE VENDOR AND PRODUCT EVALUATION