

To: Kevin Fry, Chair of the Valuation of Securities (E) Task Force  
Members of the Valuation of Securities (E) Task Force  
Interested Persons  
From: Bob Carcano, Senior Counsel, SVO  
Date: November 7, 2011  
Re: Revised Draft of the Amendment to the *Purposes and Procedures Manual* to Provide Final Instructions for Modeled and Non-Modeled Securities

1. **Introduction and Background** – Attachments One and Two were released for comment prior to and in anticipation of the just concluded NAIC Fall National Meeting. During the meeting, a further change to the text was proposed by NAIC staff, shown in paragraph (c) iv below, to eliminate the risk of confusion with the recently revised and much more detailed instructions contained in the statutory accounting guidance. The Task Force directed that this proposed friendly amendment be released for a 10 day comment period.

**Note: This document reflects the editorial changes made by Mr. Shepherd as friendly amendments during the November 29, 2011 meeting of the Task Force.**

**Attachment One**  
**Proposed Final Instructions**

**Part Three – Credit Assessment**

**Section 3. Structured Transactions and Structured Securities**

The following types of securities are referred to as structured transactions for purposes of internal SVO organization and analysis and this Part of the Manual. Analysis of these securities shall focus on the specific factors discussed below.

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**(c) General Instructions and Definitions**

(i) Scope - This section 3 (c) explains the financial modeling methodology applicable to RMBS and CMBS (defined below) securitizations and the carrying value methodology applicable to modeled and non-modeled securities subject to *Statement of Statutory Accounting Principles (SSAP) No. 43 Revised — Loan-Backed and Structured Securities* (“SSAP No. 43R”). Please refer to SSAP No. 43R for a description of securities subject to its provisions. The VOS/TF does not formulate policy or administrative procedures for statutory accounting guidance. Reporting insurance companies are responsible for determining whether a security is subject to SSAP No 43R and applying the appropriate guidance.

(ii) Important Limitation on the Definitions Contained in the Section – The definitions of RMBS and CMBS contained in this subsection are *intended solely to permit the SVO to communicate with financial modeling vendors, insurance company investors who own RMBS and CMBS subject to financial modeling and or carrying value methodology and their investment advisors to facilitate the performance by the SVO of the financial modeling methodology described below. The definitions contained in this Section are not intended for use and should not be used as accounting or statutory statement reporting instructions or guidance.* Readers must refer to SSAP No. 43R for applicable accounting guidance and reporting instructions.

As used in this Section 3 (c):

For the purposes of applying the financial modeling methodology described below, **CMBS stands for** commercial mortgage-backed securities and means structured securities backed by direct interests in commercial real estate mortgage loans originated in the United States. The definition of CMBS may refer to securitizations backed by commercial mortgages, respectively, originated outside of the United States if and to the extent that the vendor selected by the NAIC to conduct the financial modeling: 1) has the necessary information about the

~~commercial residential~~ mortgage and ~~commercial residential~~ mortgage loans originated outside of the United States to fully model the resulting securities and 2) can adapt the modeling process to account for any structural peculiarities associated with the jurisdiction in which the mortgage was originated.

For the purposes of applying the financial modeling methodology described below, **RMBS** stands for residential mortgage-backed securities and means structured securities backed by non-agency residential mortgages originated in the United States, where the collateral consists of loans pertaining to non-multi-family homes. That includes prime, subprime and Alt-A mortgages, as well as home-equity loans, home-equity lines of credit and Re-REMICs of the above. Excluded from this definition is agency RMBS where the mortgages are guaranteed by federal and federally sponsored agencies such as GNMA (Government National Mortgage Association, FNMA (Federal National Mortgage Association) or FHLMC (Federal Home Loan Mortgage Corporation) and loans against manufactured or mobile homes or collateralized debt obligations backed by RMBS. The exclusion covers bonds issued and guaranteed by, or only guaranteed by, the respective agency. Also not included are loans guaranteed by the U.S. Department of Veteran Affairs or the U.S. Department of Agriculture's Rural Development Housing and Community Facilities Programs. The definition of RMBS may refer to securitizations backed by residential mortgages, respectively, originated outside of the United States if and to the extent that the vendor selected by the NAIC to conduct the financial modeling: 1) has the necessary information about the residential mortgage and residential mortgage loans originated outside of the United States to fully model the resulting securities and 2) can adapt the modeling process to account for any structural peculiarities associated with the jurisdiction in which the mortgage was originated.

**NOTE:** The above definitions reflect limitations associated with the financial modeling process, NAIC ARO internal naming conventions and SVO processes, as more fully discussed below and may therefore be subject to a narrower or a broader reading in any reporting period. ***Please call the SVO with any concerns or questions about the scope of the definitions for a given reporting period.***

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- It is possible that the scope of the RMBS and CMBS definitions may be broadened because the financial modeling vendors indicate other collateral or waterfall structures can be modeled.
- NAIC AROs may adopt different internal conventions with respect to what market or asset segments are within their rated populations of RMBS, CMBS or ABS. This could affect the application of the adopted NAIC methodology or require the NAIC to select which naming process it wishes to adopt.

- It is possible that the SVO will acquire analytical assessment capabilities that permit the assessment of existing, additional or different structured securities that cannot now be modeled or that are not currently rated.
- (iii) Analytical Procedures Applicable to RMBS and CMBS Securitizations Subject to Financial Modeling Methodology

(1) Filing Exemption Status of RMBS and CMBS

RMBS and CMBS are not eligible for the filing exemption provided in Part Two, Section 4 (e) (i) of this Manual because credit ratings of NAIC AROs are no longer used to set risk-based capital (RBC) for RMBS or CMBS. However, RMBS and CMBS are not submitted to the SVO. Please refer to Part Two, Section 4 (f) (i) of this Manual and Section 3 (a) of this Part for related instructions.

(2) Use of Financial Modeling for Year-End Reporting for RMBS and CMBS

Beginning with year-end 2009 for RMBS and in 2010 for CMBS, ~~probability weighted net present values for RMBS and beginning in 2010 for net present values for CMBS~~ will be produced under SVO supervision by an NAIC-selected vendor using its financial model with defined analytical inputs selected by the SVO and approved by the ~~VOSTF/VOS/TF~~. The vendor will provide the SVO with a range of net present values for each RMBS or CMBS corresponding to each NAIC designation category. The NAIC designation for a specific RMBS or CMBS is determined by the insurance company, based on carrying value ranges. *Please refer to SSAP No. 43R for guidance on all accounting and related reporting issues.*

(3) Rules for Quarterly Reporting

RBC is reported to the NAIC at year-end for all companies subject to RBC, although some states might require particular insurers to report RBC quarterly. Accordingly, there is no national need to model RMBS or CMBS except at year-end. The Valuation of Securities (E) Task Force may nevertheless recommend to the NAIC that modeling should be updated more frequently than annually, as it may deem necessary.

(4) Analytical Procedures for RMBS and CMBS

The SVO shall develop and implement all necessary processes to coordinate the engagement by the NAIC of a vendor who will perform

loan-level analysis of insurer-owned RMBS and CMBS using the vendor's proprietary models.

(a) RMBS and CMBS Subject to Financial Modeling

(i) Setting Microeconomic Assumptions and Stress Scenarios

Not later than September of each year, the SVO shall begin working with the vendor to identify the assumptions, stress scenarios and probabilities (hereafter model criteria) the SVO proposes to use at year-end to run the vendor's financial model.

The VOS/TF shall schedule a regulator-to-regulator meeting so that it can consult with staff and the vendor on the proposed model criteria. The purpose of the regulator-to-regulator meeting is to permit the staff and vendor to explain its recommendations; how the analytical processes intended to be used will produce net present values of RMBS and CMBS and to permit the VOS/TF to provide policy direction that would assist the SVO to identify the technical approaches most likely to secure the regulatory objective. The SVO shall incorporate whatever guidance is provided by the VOS/TF at this regulator-to-regulator meeting into the proposed model criteria and prepare a Proposed Model Criteria Document.

If directed by the VOS/TF, the SVO shall release the Proposed Model Criteria Document to the public in anticipation of a public meeting of the VOS/TF. The purpose of the public meeting is to provide an opportunity for insurance company investment managers with responsibility for RMBS and CMBS to ask questions and comment on the proposed model criteria or process.

The SVO is directed to consider the technical comments made by the industry and/or other interested persons during the public meeting. Subsequent to the meeting, the SVO shall prepare a questions-and-answers document in which it shall list and reply to the technical questions and concerns expressed at the public meeting. The SVO may make whatever technical adjustments to the proposed model criteria it shall in its analytical discretion deem appropriate

and publish a Final Proposed Model Criteria Document on its Web page.

(ii) The Financial Modeling Process

The SVO shall obtain loan-level analysis of RMBS and CMBS using the selected vendor's proprietary financial model.

The financial model used by the SVO is expected to provide for each of the analytical steps that follow: a macroeconomic process, a mortgage loan credit process and a waterfall process.

The macroeconomic process projects the future performance of macroeconomic variables. These variables and various scenarios to be employed in this step of the financial modeling process will have been determined through the meetings described in subparagraph (i) above.

The mortgage loan credit process projects loan performance based on the projected macroeconomic variables and loan characteristics. The loan characteristics employed may be broadly identified and discussed in the Final Model Criteria Document to the extent the VOS/TF deems it necessary to ensure attainment of regulatory objectives, but subject to legitimate commercial and proprietary interests of the financial model vendor.

The results of the mortgage loan credit model provide the scenario inputs to produce a tranche level cash flow "waterfall."

What follows is, therefore, intended as a general description of one such process.

Loan-level analysis

**RMBS** - Loan-level analysis begins with historical loan performance. Loans are classified as performing or non-performing. Based on loan characteristics and macroeconomic variables, transition probabilities are calculated. Because the parameters of the model are path-dependent, Monte

Carlo simulation is used. A random drawing against these calculated probabilities decides the performance group or exit group (prepayment or default) that the loan will be assigned to during the next month. The loan-level prediction is then aggregated into pool level projected curve. For purposes of loss severity, the same default probabilities are applied to maintain consistency. Additional components that contribute to the ultimate loss severity analysis include collateral deficiency (unpaid balance less REO sales price), lost interest (accrued as servicer advances), expenses (legal fees, property taxes and brokerage fees) and mortgage insurance considerations.

**CMBS** - The vendor will review raw loan level data sourced from servicers and trustees for inconsistencies and inaccuracies, correcting the data where applicable. Based upon SVO directions, the vendor will manually review and re-underwrite certain loans in each pool based upon size, credit history or other criteria at the discretion of the SVO. In addition to loan level performance, the vendor's analysis will reasonably take into account other factors known to bear on long-term property performance, such as age, size and locational characteristics. The vendor will then utilize market-derived income growth curves and capitalization rates to project the collateral performance of each loan in a given CMBS issue. Based on parameters and triggers such as debt service coverage levels, extension parameters and workout periods and costs, produce an outcome and loss estimate for each loan in the pool.

### **RMBS and CMBS**

Once generated, pool cash flows are passed through the bond waterfall. The "waterfall" is a set of rules derived from the terms of the contract governing the RMBS or CMBS securitization that determine which bonds get paid principal and interest and how losses are distributed at a particular point in time. Waterfall models for individual RMBS and CMBS

securitizations can be obtained from a reputable vendor (often referred to as a deal library).

The net present value for the insurer-owned RMBS or CMBS tranche is derived by applying a discount rate to the projected/probability weighted cash flow. In multiple scenario approaches, the mortgage credit model and waterfall model are used to calculate the present value of losses under each scenario.

The final valuation is the par value~~eye~~ minus the probability weighted present value of losses. The interest rate used to discount the bond cash flow will be the bond coupon.

(iii) Validation of Modeled Results

The NAIC and SVO staff shall ensure that the vendor has extensive internal quality-control processes in place. In addition, however, the SVO shall conduct its own quality-control checks of the vendor's valuation process.

(iv) Publication of Final Results

Upon delivery by the vendor of values for the RMBS and CMBS portfolio and subject to the final modeling process and completion of all SVO quality control and validation processes, the SVO shall cause the valuation file for the modeled insurer-owned portfolio to be delivered to other appropriate NAIC staff for dissemination to insurance companies.

(v) Use of Net Present Value and Carrying Value for Financially Modeled RMBS and CMBS

For each modeled RMBS and CMBS, the financial model determines the net present value at which the expected loss equals the midpoint between the RBC charges for each NAIC designation; i.e., each price point, if exceeded, changes the NAIC designation. Net present value is the net present value of principal losses, discounted using the security's coupon rate (adjusted in case of original issue discount securities to book yield at original issue and in case of floating rate securities, discounted using LIBOR curve + Origination spread). Because of the difference in

RBC charge, the deliverable is five values for each RMBS and CMBS security for companies required to maintain an AVR and five values for companies not required to maintain an AVR. This is illustrated in the chart below.

**RBC charge / NAIC designation (pre-tax)**

<b>P&amp;C</b>	<b>RBC</b>	<b>Midpoint</b>
<b>1</b>	0.3%	0.65%
<b>2</b>	1.0%	1.50%
<b>3</b>	2.0%	3.25%
<b>4</b>	4.5%	7.25%
<b>5</b>	10.0%	20.00%
<b>6</b>	30.0%	
<b>Life</b>	<b>RBC</b>	<b>Midpoint</b>
<b>1</b>	0.4%	0.85%
<b>2</b>	1.3%	2.95%
<b>3</b>	4.6%	7.30%
<b>4</b>	10.0%	16.50%
<b>5</b>	23.0%	26.50%
<b>6</b>	30.0%	

The NAIC designation for a given modeled RMBS or CMBS CUSIP owned by a given insurance company depends on the insurer's carrying value of each RMBS or CMBS, whether that carrying value, in accordance with SSAP No. 43R, paragraphs 25–26a, is the amortized cost or fair value, and where the carrying value matches the price ranges provided in the model output for each NAIC designation; *except that a RMBS or CMBS tranche that has no expected loss under any of the selected modeling scenarios and that would be equivalent to an NAIC 1 Designation if the filing exempt process were used, would be assigned an NAIC 1 Designation regardless of the insurer's carrying value.* Please refer to the detailed instructions provided in SSAP No. 43R.

(iv) Analytical Procedures Applicable to Securities Not Subject to Financial Modeling Methodology

(A) Securities Not Modeled but Rated by an NAIC ARO *and Subject to Modified Filing Exempt Process*

To obtain the NAIC designation for a CUSIP not modeled but rated by an NAIC ARO, please refer to the detailed instructions in SSAP No. 43R, paragraph 26b. ~~is obtained as follows:~~

~~1: Convert the appropriate NAIC ARO rating into its equivalent NAIC Designation to identify the initial NAIC designation as follows:~~

- ~~▪ Identify all NAIC ARO ratings for the CUSIP;~~
- ~~▪ Apply the procedure described in Part Two, Section 4 (e) (i) of this Manual to select the second lowest NAIC ARO rating; and~~
- ~~▪ Convert the second lowest NAIC ARO rating into its equivalent NAIC Designation (use the List of Acceptable Rating Organizations and the Rating Equivalent of Their Systems to NAIC Designations in Part One Section 7 (d) of this Manual to identify the equivalent NAIC Designation). Compare the amortized cost of the security to the range of values assigned to the NAIC designations provided in **Table 1** below.~~
- *Securities assigned an NAIC ARO credit rating equivalent to an NAIC 1 designation are assumed to have zero expected loss and therefore the designation is not modified by the carrying value and remain NAIC 1. Securities assigned an NAIC ARO credit rating equivalent to an NAIC 6 designation are not modified by the carrying value and remain NAIC 6.*

~~2: Except for Excluded Securities, defined below in subsection (f) below, determine the final NAIC designation by comparing the carrying value of the CUSIP to the range of values provided in **Table 1** below.~~

The Table below is used to implement the carrying value methodology for described above applies to all securities that are subject to SSAP No. 43R, except Excluded Securities as defined in subsection (D) below.

**Table One - NAIC Designation Breakpoints for Loan Backed and Structured Securities**

<b>Life</b>	<b>1&gt;2</b>	<b>2&gt;3</b>	<b>3&gt;4</b>	<b>4&gt;5</b>	<b>5&gt;6</b>
NAIC2	97.88	100.00	104.69	116.23	132.04
NAIC3	93.49	95.52	100.00	111.02	126.12
NAIC4	84.22	86.04	90.08	100.00	113.61
NAIC5	74.13	75.73	79.29	88.02	100.00

<b>P&amp;C and Health</b>	<b>1&gt;2</b>	<b>2&gt;3</b>	<b>3&gt;4</b>	<b>4&gt;5</b>	<b>5&gt;6</b>
NAIC2	99.14	100.00	101.81	106.20	123.13
NAIC3	97.38	98.22	100.00	104.31	120.94
NAIC4	93.36	94.16	95.87	100.00	115.94
NAIC5	80.52	81.22	82.69	86.25	100.00

*Designation changes when carrying value exceeds the breakpoint*

~~The carrying value methodology described above applies to all securities that are subject to SSAP No. 43R, except Excluded Securities as defined in subsection (D) below.~~

(B) *Securities Not Modeled and Not Rated by an NAIC ARO or Designated by the SVO*

RMBS and CMBS tranches that cannot be modeled and are not rated by an NAIC ARO or designated by the SVO, are either (X) assigned the NAIC administrative symbol NR (not rated), requiring subsequent filing with the SVO, or (Y) assigned the NAIC designation for Special Reporting Instruction; i.e., an NAIC 5\* or NAIC 6\* (five-star or six-star), as discussed in Part Two, Section 5 of this Manual.

(C) *Exclusion of Certain Securities from Application of Carrying Value Methodology for Non Modeled Securities*

1. Exclusion and Excluded Securities

The carrying value methodology described in subsection (iv) A 2, above, shall not apply (the Exclusion) to Credit Tenant Loans,

Equipment Trust Certificates (whether rated by an NAIC ARO or designated for quality by the SVO) or to every other individual security to which the SVO has assigned an NAIC Designation, (collectively, “Excluded Securities”), effective with the 2011 year-end reporting cycle. [Please refer to SSAP No. 43R, paragraph 26c.](#)

2. Deriving NAIC Designations for Excluded Securities

The NAIC Designation for Excluded Securities that are Credit Tenant Loans or Equipment Trust Certificates shall be the credit rating assigned by NAIC AROs after application of the filing exemption procedure described in Part Two, Section 4 (e) (i) of this Manual or the NAIC Designation assigned by the SVO. The NAIC Designation for Excluded Securities that are individual securities to which the SVO has assigned an NAIC Designation, shall be the NAIC Designation assigned by the SVO.

## Attachment Two

### Proposal to Modify Part Two, Section 4 (f) of the *Purposes and Procedures Manual*

(f) **Limited Filing Exemption for RMBS and CMBS**

(i) **RMBS and CMBS that can be Financially Modeled.**

RMBS and CMBS that can be financially modeled are exempt from filing with the SVO.

NAIC Designations for RMBS and CMBS that can be financially modeled are determined by application of the methodology discussed in Part Three, Section 3 of this Manual, not by the use of credit ratings of NAIC AROs.

**RMBS and CMBS securities that cannot be Financially Modeled**

(A) But are rated by an NAIC ARO

RMBS and CMBS that cannot be financially modeled but that are rated by an NAIC ARO are exempt from filing with the SVO. The NAIC Designations for these RMBS and CMBS are determined by application of the modified filing exemption discussed in Part Three, Section 3 of this Manual **and or in the Interim Instructions included in this Manual as a Special Insert.**

(B) But are not rated by an NAIC ARO

RMBS and CMBS that cannot be financially modeled and that are not rated by an NAIC ARO are not filing exempt and must be filed with the SVO as discussed in Part Two, Section 5(i). See also, Part Three, Section 3 of this Manual.

**We propose** amending this text:

The NAIC Designations for these RMBS and CMBS are determined by application of the modified filing exemption discussed in Part Three, Section 3 of this Manual **and or in the Interim Instructions included in this Manual as a Special Insert –**

**To this text**

The NAIC Designations for these RMBS and CMBS are determined by application of the filing exemption discussed in Part Two, Section 4 (e) (i) this Manual.

**And adding** (c) to Section 3 references in this subparagraph (f) – i.e., Section 3 (c).