# **Surplus Share Treaties**

#### **Educational Objectives**

After learning the content of this assignment, you should be able to:

- Describe the operation, functions, and use of surplus share treaties.
- Describe the purpose of the following common clauses that are modified for use in surplus share treaties:
  - Reinsuring clause
  - Liability of the reinsurer clause
  - Definitions clause
  - Exclusions clause
  - Reports and remittances clause
- Describe the purpose of the following clauses designed or adapted for surplus share treaties:
  - Surplus liability clause
  - Net retention clause
  - Retention and limits clause
  - Method of cession clause
- Explain how limits profiles and line guides aid in determining surplus share treaty pricing.

#### **Outline**

Overview of Surplus Share Treaties

Common Clauses Modified for Use in Surplus Share Treaties

Clauses Designed or Adapted for Surplus Share Treaties

**Surplus Share Treaty Pricing** 

**Summary** 

# **Surplus Share Treaties**

# **OVERVIEW OF SURPLUS SHARE TREATIES**

Surplus share is a type of pro rata reinsurance that can be used to address the needs of primary insurers insuring large, complex property loss exposures.

Under a surplus share treaty, the primary insurer determines what loss exposures are subject to the treaty and what percentage share it will retain with respect to each ceded loss exposure. By obtaining reinsurance for only the surplus share of an underlying policy's coverage limit, the primary insurer restricts its liability to the same coverage limit amount for similar categories of loss exposures. This discussion focuses on the operation, functions, and use of surplus share reinsurance in a treaty context.

# **Operation of Surplus Share Treaties**

As with quota share reinsurance, the primary insurer and reinsurer under a surplus share treaty share the underlying policy premiums and losses for each loss exposure on a percentage basis. Unlike with quota share reinsurance, the percentage used to share policy premiums and losses varies for each loss exposure subject to a surplus share treaty. The percentage is determined by the ratio of the ceded loss exposure's coverage limit to the amount of the primary insurer's retention, as the exhibit illustrates. See the exhibit "Illustration of a Surplus Share Treaty With a Minimum Line of \$100,000."

Surplus share reinsurance addresses two disadvantages that primary insurers encounter with quota share reinsurance.

The first disadvantage is that in quota share reinsurance, every loss exposure, regardless of coverage limit, is subject to **cession**—even ones that the primary insurer could safely retain in their entirety. In contrast, surplus share reinsurance applies only to those loss exposures with coverage limits that exceed the primary insurer's line. Therefore, loss exposures with coverage limits below the primary insurer's line are not reinsured even though they are in the category of loss exposure that would otherwise be subject to the surplus share treaty. For example, see policy 1 in the "Illustration of a Surplus Share Treaty With a Minimum Line of \$100,000" exhibit.

The line used to establish the applicability of a surplus share treaty should not be confused with the attachment point used in excess of loss reinsurance. The primary insurer's line establishes the threshold that determines whether the surplus share treaty applies to an individual loss exposure, whereas the attachment point establishes the dollar amount above which the reinsurer responds to losses.

#### Cession

The transaction of transferring a risk from a primary insurer to a reinsurer.

# Illustration of a Surplus Share Treaty With a Minimum Line of \$100,000

Underlying I	Insurance	<b>Policies</b>
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		, ,		
	1	2	3	4
Underlying Policy Limit	\$75,000	\$200,000	\$300,000	\$600,000
Line (per Line Guide)	\$100,000	\$100,000	\$100,000	\$100,000
Primary Insurer's Retention	\$75,000	\$100,000	\$100,000	\$100,000
Percentage of Policy Premium and Losses Retained by Primary Insurer (Retention ÷ Policy Limit)	100%	50%	33%*	17%*
Percentage of Policy Premium and Losses Ceded to Surplus Share Reinsurer *Rounded	0%	50%	67%*	83%*

[DA05331]

As with quota share treaties, surplus share treaties share all losses from the first dollar (ground-up losses), regardless of the loss amount. For example, a primary insurer would be indemnified by its reinsurer for the reinsurer's proportionate share of a \$1,000 loss although the primary insurer's line for this loss exposure is \$100,000.

The second disadvantage of quota share reinsurance is that the primary insurer's retention is a fixed percentage and therefore the dollar amount of retention increases as the coverage limit needed increases. In contrast, because the line in a surplus share treaty is a specified dollar amount, the primary insurer's retention does not necessarily increase as the coverage limit needed increases.

Unlike with quota share reinsurance, in which the percentage of sharing is the same for all loss exposures subject to the treaty (with variable quota share being an exception), a surplus share treaty is usually supported by a line guide that permits the primary insurer to vary the dollar amount of the line depending on each loss exposure's loss severity potential. For example, a simplified line guide may specify a \$100,000 line for buildings that do not have automatic sprinkler systems and a \$300,000 line for those that do. The primary insurer can justify this larger line because buildings with automatic sprinkler systems generally experience fewer severe losses.

## Illustration of a Surplus Share Treaty Supported by a Line Guide

The exhibit illustrates a surplus share treaty supported by a simplified line guide and provides three cases that demonstrate the discretion afforded the primary insurer's underwriters in establishing the line for a specific loss exposure. In these cases, the primary insurer's underwriter categorizes insurance applicants as high, average, or low quality based on the simplified line guide. See the exhibit "Illustration of a Surplus Share Treaty Supported by a Simplified Line Guide."

## Illustration of a Surplus Share Reinsurance Program

Surplus share reinsurance is often written in layers. The surplus share treaty that provides the first layer of reinsurance after the primary insurer's retention is called a first surplus treaty. The first surplus treaty could apply over other reinsurance, such as a quota share treaty or a facultative excess of loss agreement. A second, third, and even a further surplus treaty may handle loss exposures with even greater coverage limit needs and provide the primary insurer with additional large line capacity. Reinsurance coverage provided by higher layers is used only when an individual loss exposure is greater than the preceding layer or layers plus the primary insurer's retention.

The exhibit illustrates a reinsurance program that includes three surplus share treaties (each with three lines) and that provides the primary insurer with the capacity to insure loss exposures requiring coverage limits up to \$500,000. These three surplus share treaties operate together to share premiums and losses in the same manner as a reinsurance program with a nine-line first surplus treaty. The exhibit also shows how the coverage limit needs of a \$450,000 loss exposure would be addressed by the three surplus share treaties. See the exhibit "Reinsurance Program Consisting of Three Surplus Share Treaties."

The exhibit shows how a \$10,000 loss for a \$450,000 policy would be shared in the reinsurance program set out in the "Reinsurance Program Consisting of Three Surplus Share Treaties" exhibit. Any loss sustained by this \$450,000 loss exposure would be shared using the same percentages as those shown in the exhibit. See the exhibit "Loss Allocation Among Three Surplus Share Treaties."

The policy premium for the \$450,000 loss exposure is also shared using percentages in the "Loss Allocation Among Three Surplus Share Treaties" exhibit. However, each reinsurer's share of the premium is then reduced by a predetermined percentage, and the excess is paid to the primary insurer as a ceding commission. For simplicity, a 40 percent ceding commission is used for each layer in the exhibit. However, a lower ceding commission percentage is typically negotiated for higher surplus share layers. See the exhibit "Premium Allocation Among Three Surplus Share Treaties."



# Illustration of a Surplus Share Treaty Supported by a Simplified Line Guide

Insurer:

Primary Insurer

Reinsurer:

Reinsurance Company

Type of Reinsurance:

Surplus Share Treaty

Causes of Loss:

**Broad Form Causes of Loss** 

Lines:

Class A (highest quality) \$150,000

Class B (average quality) \$100,000

Class C (lowest quality) \$50,000

Limits:

Five lines but no more than \$250,000 on any one loss exposure

Minimum line of \$50,000

Special Conditions:

The primary insurer may bypass the treaty or limit the reinsurer's liability if the loss potential warrants such action.

Case 1 — The insurance applicant, the owner of a plumbing supply business, requests coverage for \$250,000 of business personal property contained in a leased fire-resistive building. The business personal property consists primarily of plumbing supplies, equipment, and tools. The building is located in a small industrial park that has adequate fire protection.

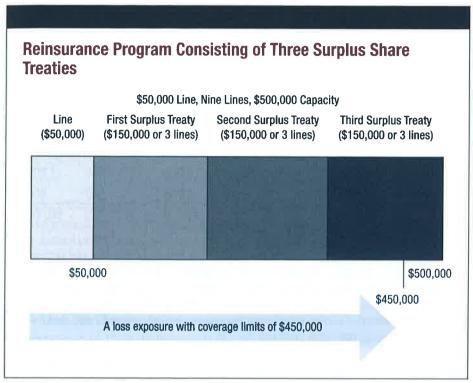
Because of this loss exposure's positive loss characteristics, the primary insurer's underwriter categorizes it as Class A. The underwriter sets the maximum line for this loss exposure at \$150,000 as suggested by the line guide.

Case 2 – The insurance applicant owns a \$300,000, two-story building that has a multiple occupancy use. The building's first floor is used as a retail tobacco shop, and the second floor has two residential apartments. The building is thirty years old and is joisted-masonry construction (masonry walls with wood joists). The building is located in an urban shopping district, and the neighboring properties are of similar construction and use. The fire protection applicable to the property is classified as below average because of the community's outdated firefighting equipment.

The primary insurer's underwriter considers this loss exposure to be of average quality and classifies it as Class B. The underwriter establishes the line for this loss exposure at \$50,000, which is half the suggested line but satisfies the minimum line.

Case 3 – The insurance applicant owns a fifteen-unit wood-frame motel valued at \$100,000 that is located in a rural area with limited public fire protection. The applicant also owns a nearby manufacturing plant that is already insured by the primary insurer.

The primary insurer's underwriter recognizes this loss exposure as unacceptable because of its wood-frame construction and limited public fire protection. Rather than decline the loss exposure, the underwriter agrees to insure (and price) property insurance on the motel if facultative reinsurance can be obtained. In this case, the primary insurer chooses to use its discretion to bypass the surplus share treaty so that adverse loss results from this loss exposure cannot affect the profitability (and future pricing) of the treaty.



[DA05333]

	#E0 000 Line Nine Lines #E00	000	0		
	\$50,000 Line, Nine Lines, \$500, Share of Loss Exposure	000	Loss		Share of Loss*
Primary Insurer	\$50,000 ÷ \$450,000 = 11.11%	×	\$10,000	=	\$ 1,111
First Surplus	\$150,000 ÷ \$450,000 = 33.33%	×	\$10,000	=	3,333
Second Surplus	\$150,000 ÷ \$450,000 = 33.33%	×	\$10,000	=	3,333
Third Surplus	\$100,000 ÷ \$450,000 = 22.22%	×	\$ 10,000	=	2,222
					\$10,000

#### [DA05334]

A primary insurer usually purchases a first surplus treaty that has sufficient capacity to handle its normal coverage limit needs. Second and subsequent surplus treaties are purchased and priced (through a reduction in ceding commission percentages) to address the atypical coverage limit needs of a relatively small share of the primary insurer's policies.

#### **Premium Allocation Among Three Surplus Share Treaties**

	Gross Premium		Share of Loss Exposure		Share of Gross Premium*	Ceding Commission*	Net Premium
Primary Insurer	\$6,000	×	11.11%	=	\$ 667	\$2,133	\$2,800
First Surplus	\$6,000	×	33.33%	=	2,000	- 800	1,200
Second Surplus	\$6,000	×	33.33%	=	2,000	- 800	1,200
Third Surplus	\$6,000	×	22.22%	=	1,333	- 533	800
					\$6,000	\$ 0	\$6,000

<sup>\*</sup> Rounded

The primary insurer retains \$667 of the \$6,000 gross premium. The first and second surplus share reinsurers are owed the net amount of \$1,200 each (\$2,000 less the 40 percent ceding commission), and the third surplus share reinsurer is owed the net amount of \$800 (\$1,333 less the ceding commission). By remitting the premium to the reinsurers net of ceding commission, the primary insurer retains \$2,800 (\$667 + \$2,133) of the \$6,000 gross premium.

#### [DA05335]

Primary insurers can, and often do, satisfy additional coverage limit needs by purchasing facultative reinsurance. However, primary insurers generally prefer to avoid the expense of facultative placements if a volume of loss exposures with large coverage limit needs is anticipated.

# **Functions of Surplus Share Treaties**

Surplus share treaties provide for primary insurers these main functions, some of which may be better served by other types of reinsurance:

- Increased large line capacity
- Stabilized loss experience
- Surplus relief

## **Increased Large Line Capacity**

Surplus share reinsurance is designed to provide primary insurers with flexibility in insuring large loss exposures, provided the characteristics of those loss exposures meet predetermined parameters.

Surplus share reinsurance is often said to provide the primary insurer with "automatic capacity" because the surplus share treaty incorporates the primary insurer's line guide and therefore expands and contracts underwriting capacity depending on the loss exposure's relevant attributes. Surplus share treaties provide the primary insurer with automatic access to additional large line

capacity when the quality of the loss exposure justifies it. The alternative, and a relatively expensive one, is to purchase facultative reinsurance.

In most surplus share treaties, the primary insurer's underwriter uses judgment in setting the line on a loss exposure after consulting the recommendations contained in the line guide. As a result, the primary insurer could adversely select against the reinsurer in the cession of loss exposures. The second case in the "Illustration of a Surplus Share Treaty Supported by a Simplified Line Guide" exhibit is an example in which the primary underwriter may be practicing adverse selection by ceding relatively undesirable loss exposures to the reinsurer.

To reduce the likelihood of adverse selection, while still providing the primary insurer with flexibility in setting the line for each loss exposure, the surplus share treaty often specifies a minimum line and maximum cession.

Loss exposures for which the primary insurer is unwilling to commit to the minimum line cannot be ceded to the surplus share treaty. Reinsurers would be adversely selected against if they permitted primary insurers to reduce their line so far that they would have only minimal participation in the financial consequences of their underwriting decisions.

The maximum cession under a surplus share treaty is stated as a dollar limit. However, the actual amount ceded under the treaty is based on a multiple of the primary insurer's line, subject to the limit imposed by the maximum cession.

For example, a \$1.2 million loss exposure for which the line guide suggests a \$200,000 line and five-line capacity would meet the requirements of a surplus share treaty with a minimum line of \$100,000 and a maximum cession of \$2 million. The primary insurer would retain \$200,000 of the loss exposure, and \$1 million would be ceded under the treaty. However, if the primary insurer's underwriter reduced the line on this loss exposure from \$200,000 to \$100,000, the amount ceded under the surplus share treaty would be only \$500,000 (five times the \$100,000 line), and the primary insurer would need to consider retaining the additional liability (or coverage amount) or purchasing facultative reinsurance.

Finally, reinsurers often include a sliding scale commission provision in surplus share treaties to give the primary insurer a financial incentive to underwrite effectively and to cede quality loss exposures to the treaty.

# **Stabilized Loss Experience**

Surplus share reinsurance stabilizes a primary insurer's loss experience by limiting the primary insurer's participation on each loss to its line. While this may be effective over a period of time, surplus share treaties usually do not provide primary insurers with sufficient protection from an accumulation of losses that could result from a catastrophic event. Primary insurers usually address their exposure to catastrophe losses by using catastrophe excess of loss reinsurance.



7.10

In addition to limiting losses to the primary insurer's line, surplus share treaties enable the primary insurer to develop size homogeneity within each category of loss exposure. Size homogeneity among loss exposures is desirable because it makes loss forecasting more accurate. For example, the potential for a primary insurer's loss ratio to fluctuate is greater when it insures loss exposures with varying coverage needs than when it insures loss exposures with the same coverage limit.

The primary insurer's line guide uses loss exposure attributes (such as construction, occupancy, protection, and exposure) to categorize loss exposures based on potential loss severity and, therefore, to tailor the primary insurer's line to each category of loss exposure.

## **Surplus Relief**

Surplus share treaties and quota share treaties provide surplus relief in the same way. The primary insurer often cedes a large amount of premium, thereby decreasing its gross written premiums, and receives a ceding commission, thereby increasing its policyholders' surplus. Although pro rata reinsurance improves the primary insurer's capacity ratio, surplus share treaties are generally less effective than quota share treaties in providing surplus relief because less premium is ceded and therefore less ceding commission is received.

# **Surplus Share Treaties as Part of a Reinsurance Program**

Primary insurers use surplus share reinsurance for <u>large</u>, complex property loss exposures and when both large line capacity and surplus relief are needed.

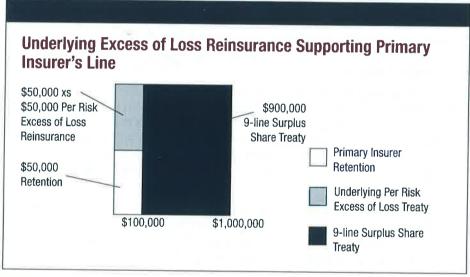
New primary insurers, or primary insurers selling a new insurance product or entering a new territory, may choose to use quota share reinsurance until the volume of insurance policies sold increases enough to stabilize loss experience. With sufficient and credible loss experience, the primary insurer usually chooses to replace the quota share treaty with a surplus share treaty so that more premium is retained.

A surplus share treaty may be used as the only reinsurance treaty that applies to the primary insurer's insurance policies, or it may be used in conjunction with a quota share treaty or excess of loss treaty. Surplus share treaties are often layered to provide the primary insurer with sufficient large line capacity.

Surplus share reinsurance, like quota share reinsurance, does not typically provide the primary insurer with the protection needed to withstand a catastrophe loss. Although the primary insurer's liability would be limited on each loss, surplus share reinsurance would not protect against an accumulation of losses. Catastrophe loss protection is best provided by a catastrophe excess of loss treaty.

A primary insurer will sometimes use per risk excess of loss reinsurance to increase its line and a surplus share treaty to obtain greater large line capacity. For example, a primary insurer would need a line of \$100,000 to have the capacity under its nine-line surplus share treaty to insure loss exposures requiring \$1 million in coverage limits. However, because of its restrictive line guide, this primary insurer would be limited to a line of \$50,000, thereby limiting the amount of coverage provided by the surplus share treaty to \$500,000  $(\$50,000 + (9 \times \$50,000))$ . The primary insurer could purchase facultative per risk excess of loss reinsurance of \$50,000 xs \$50,000. Under this arrangement, the primary insurer would preserve its \$50,000 line and be able to write \$1 million in coverage limits.

When excess of loss reinsurance is used like this, it is called underlying excess. The exhibit illustrates how underlying excess of loss reinsurance supports the primary insurer's line. Surplus share treaties usually specify whether they will permit the primary insurer to reinsure its line in this way. See the exhibit "Underlying Excess of Loss Reinsurance Supporting Primary Insurer's Line."



[DA05348]

# **COMMON CLAUSES MODIFIED FOR USE IN SURPLUS SHARE TREATIES**

Surplus share treaties usually contain many of the same types of clauses as other reinsurance treaties.

Among these common clauses, some are modified for use in surplus share treaties to provide additional details and clarification regarding the responsibilities of the primary insurer and reinsurer:

- Reinsuring clause
- Liability of the reinsurer clause

- Definitions clause
- Exclusions clause
- Reports and remittances clause

The sample clauses presented in this discussion are for illustrative purposes only and should not be relied on to construct an actual treaty.

# **Reinsuring Clause**

The reinsuring clause can be one all-encompassing clause, or it can be divided into separate clauses, such as the cover clause and the business reinsured clause.

The exhibit shows a cover clause that may be found in a surplus share treaty. See the exhibit "Sample Cover Clause."

#### **Sample Cover Clause**

The Company will cede, and the Reinsurer will assume, the Company's Surplus Liability on risks covered hereunder, subject to the limits set forth in the Retention and Limits Clause. The liability of the Reinsurer shall commence obligatorily and simultaneously with that of the Company.

The Company shall make an entry of the amount reinsured in a book or on a form to be kept for the purpose; but, should the Company have intimation of a loss affecting any risk ceded or to be ceded before such entry has been made, the Company's Net Retention shall be fixed at the amount indicated for similar risks in its lists of limits or as shown by its book or practice, subject, however, to the limitations provided for herein. Any such case shall be advised to the Reinsurer immediately, full details being furnished in justification of the Net Retention fixed.

Notwithstanding the obligation imposed upon the Company to cede its Surplus Liability, the Company shall have the right when it considers it in the interest of the Reinsurer to do so, to restrict or omit allotments of any particular risk in such a manner as to eliminate or restrict the liability of the Reinsurer.

[DA05349]

The exhibit shows a business reinsured clause that may be found in a surplus share treaty. See the exhibit "Sample Business Reinsured Clause."

Whether presented as one or more clauses, the reinsuring clause in a surplus share treaty contains modified wording in these sections:

- Nature of cession
- Statement of attachment
- Description of policies covered

#### **Sample Business Reinsured Clause**

This Agreement is to share with the Reinsurer the interests and liabilities of the Company under all Policies for Property Business in force, written or renewed by or on behalf of the Company during the term of this Agreement and ceded to this Agreement, subject to the terms and conditions herein contained.

IDA05350]

#### Nature of Cession

The first modification involves the nature of the cession. As with quota share treaties, surplus share treaties are usually obligatory for both the primary insurer and the reinsurer.

The nature of cession is stated in the first paragraph shown in the "Sample Cover Clause" exhibit. Included in the reinsurer's agreement to indemnify the primary insurer is a statement that indemnification is "subject to the limits set forth in the Retention and Limits Clause." That statement is included because the cession is based on the primary insurer's net retention.

#### Statement of Attachment

The second modification occurs in the statement of attachment. For a new surplus share treaty, a risks attaching basis is easier for the primary insurer to administer from an underwriting perspective than a losses occurring basis.

With a losses occurring basis of attachment, each in-force policy must be reviewed for the correct retention, and the percentage ceded must be recorded. This review must be carried out because the in-force portfolio may not fit the requirements of the new surplus share treaty in terms of minimum retention, maximum cession, or number of lines. Because of the administrative problems of having a new treaty apply to an in-force portfolio, many surplus share treaties apply on a risks attaching basis—in other words, only to policies that are issued or renewed on or after the treaty's effective date.

However, if the surplus share treaty is renewed with the same reinsurer, then switching to a losses occurring basis may be appropriate because the expiring treaty would have covered the in-force policies. The "Sample Business Reinsured Clause" exhibit includes coverage for in-force policies and therefore applies on a losses occurring basis.

# **Description of Policies Covered**

The third modification pertains to the description of policies covered. The reinsuring clause (or the business reinsured clause) incorporates the description that the primary insurer uses to identify insurance policies to which the surplus share treaty applies.



In surplus share treaties, the business covered is usually property insurance policies, so the description may be as simple as "fire and allied lines," "homeowners business," or, as shown in the "Sample Business Reinsured Clause" exhibit, "all Policies for Property Business." Occasionally the description is more specific, such as "property business written in the Company's Farm Department," or "all property business written in Illinois, Ohio, and Indiana."

# **Liability of the Reinsurer Clause**

The liability of the reinsurer clause establishes when the reinsurer assumes liability and on what basis. This wording may appear in a separate liability of the reinsurer clause or as part of the reinsuring clause. The final paragraph of the "Sample Cover Clause" exhibit contains wording that reflects the intent of the liability of the reinsurer clause.

For quota share treaties, when the primary insurer's underwriter accepts coverage, the reinsurer automatically assumes liability for its share of losses. For surplus share treaties, the primary insurer's underwriter usually consults the line guide, sets the line, and cedes the surplus liability when the insurance application is accepted. If a loss occurs before the line has been set, the primary insurer must apply its normal standards and practices in setting the line.

#### **Definitions Clause**

Definitions can be included throughout the reinsurance treaty, contained in a specific clause, or both. Three key definitions for a surplus share treaty, wherever located, are those for surplus liability, risk, and net retention. See the exhibit "Sample Definitions Clause."

Surplus liability is that liability amount ceded to the reinsurer. The surplus share treaty often expressly defines this term in the definitions clause.

Risk is commonly defined in one of these ways:

- All insured values under one roof
- All insured values within four walls
- All insured values at one location

A surplus share treaty usually contains a clause that refers to one of these definitions. For example, "One risk shall be defined as respects the peril of fire as the total insured values within four walls, with the understanding, however, that the Company shall be the sole judge as to what constitutes one risk."

In this definition, the primary insurer determines what is "one risk," and, because "four walls" is not defined, what constitutes "four walls." The reinsurer may agree to let the primary insurer use its inspection reports and other information to define "four walls" within the spirit of the treaty.

Net retention can specify what underlying reinsurance the primary insurer is allowed to have to support its retention.

#### **Sample Definitions Clause**

The term "Property Business" as used in this Agreement shall mean all insurances and reinsurances written by the Company and classified as property.

The term "Policy" as used in this Agreement shall mean any binder, policy, or contract of insurance or reinsurance issued, accepted, or held covered provisionally or otherwise, by or on behalf of the Company.

The term "Net Retention" shall mean that portion of a risk retained by the Company for its net account and unreinsured in any manner except for Per Risk Excess of Loss reinsurance and Property Per Occurrence reinsurances.

The term "Surplus Liability" as used in this Agreement shall mean that portion of the Company's gross liability on any one risk which exceeds the Company's Net Retention.

"Risk" as used in this Agreement will be subject to definition solely by the Company.

"Loss occurrence" as used in this Agreement will mean the sum of all individual losses directly occasioned by any one disaster, accident, or loss or series of disasters, accidents, or losses arising out of one event, which occurs within the area of one state of the United States or province of Canada and states or provinces contiguous thereto and to one another. The duration and extent of any one loss occurrence will be limited to all individual losses sustained by the Company occurring during any period of 168 consecutive hours arising out of and directly occasioned by the same event except that the term "loss occurrence" will be defined further as follows:

- A. As regards windstorm, hall, tornado, hurricane, and cyclone, including ensuing collapse and water damage, all individual losses sustained by the Company occurring during any period of 72 consecutive hours arising out of and directly occasioned by the same event. The event need not be limited to one state or province or states or provinces contiguous thereto.
- B. As regards riot, riot attending a strike, civil commotion, vandalism, and malicious mischief, all individual losses sustained by the Company occurring during any period of 72 consecutive hours within the area of one municipality or county and the municipalities or counties contiguous thereto arising out of and directly occasioned by the same event. The maximum duration of 72 consecutive hours may be extended in respect of individual losses that occur beyond such 72 consecutive hours during the continued occupation of an insured's premises by strikers, provided such occupation commenced during the aforesaid period.
- C. As regards earthquake (the epicenter of which need not necessarily be within the territorial confines referred to in the opening paragraph of this Article) and fire following directly occasioned by the earthquake, only those individual fire losses that commence during the period of 168 consecutive hours may be included in the Company's loss occurrence.
- D. As regards freeze, only those individual losses directly occasioned by collapse, breakage of glass, and water damage (caused by bursting of frozen pipes and tanks) may be included in the Company's loss occurrence.

Except for loss occurrences referred to in A. and B., the Company may choose the date and time when any such period of consecutive hours commences provided that it is not earlier than the date and time of the occurrence of the first recorded individual loss sustained by the Company arising out of that disaster, accident, or loss and provided that only one such period of 168 consecutive hours will apply with respect to one event.

As respects those loss occurrences referred to in A. and B., if the disaster, accident, or loss occasioned by the event is of greater duration than 72 consecutive hours, then the Company may divide that disaster, accident, or loss into two or more loss occurrences provided no two periods overlap and no individual loss is included in more than one such period and provided that no period commences earlier than the date and time of the occurrence of the first recorded individual loss sustained by the Company arising out of that disaster, accident, or loss.

No individual losses occasioned by an event that would be covered by 72 hours provisions may be included in any loss occurrence claimed under the 168 hours provisions.

# **Exclusions Clause**

No standard list of exclusions exists for surplus share treaties, and the variety of possible exclusions is extensive. Depending on what the primary insurer and the reinsurer negotiate, the surplus share treaty exclusions may be brief—for example, including only nuclear incident, pollution, war risks, terrorism, and insolvency fund exclusions. However, because surplus share treaties usually pertain to property insurance, the list of exclusions may be longer, possibly excluding specific causes of loss, types of insurance, or types of property. The exclusions may apply at all times, or they may not apply when the listed operations or causes of loss are only incidental to or a small part of the primary insurer's total operations.

The exhibit shows an exclusions clause that may be found in a surplus share treaty. See the exhibit "Sample Exclusions Clause."

# **Reports and Remittances Clause**

The reports and remittances clause requirements for surplus share treaties are similar to those for quota share treaties except that the primary insurer is required to record the net retention and cession amount for each loss exposure subject to the treaty and to supply the information to reinsurer(s) via a bordereau.

The first paragraph of the reports and remittances clause shown in the exhibit specifies this record-keeping requirement. See the exhibit "Sample Reports and Remittances Clause."

#### **Sample Exclusions Clause**

This Agreement does not cover:

- A. Collision or upset, and towing
- B. Theft, robbery, and pilferage, written as such
- C. Conversion, embezzlement or secretion
- D. Manufacturers' stock at factories or warehouses
- E. Earthquake and flood when written as such
- F. All excess of loss reinsurance assumed, except agency reinsurance being reinsurance of an individual risk in which a Company agent has authority to accept on behalf of the Company
- G. Fleets' and dealers' legal liability risks
- H. Financial Guarantee and Insolvency
- I. Aircraft hulls
- J. Satellites
- K. Ocean Marine, except where covered by Inland Marine Floaters
- L. Offshore drilling rigs
- M. Original manufacture, storage, and transportation of petroleum products, except wholesale/retail of gasoline or fuel oil
- N. Original manufacture, storage, and transportation of explosives. (An explosive substance is defined as any substance manufactured for the express purpose of exploding as differentiated from other commodities used industrially and which are fortuitously explosive, such as gasoline, celluloid, fuel gases, and dyestuffs.)
- O. Difference-In-Conditions coverage, when written as such
- P. Public utilities including dams, but not to exclude water utilities or electric utilities where the value of any individual generator does not exceed \$1,000,000 total sum insured
- Q. Mobile home parks, but not to exclude mobile homes written on an individual basis
- R. Pools, Associations, Syndicates, and Insolvency Funds per the attached Pools, Associations, Syndicates, and Insolvency Funds Exclusion Clause No. 08-04.3
- S. Property Business excluded by the attached Total Insured Value Exclusion Clause No. 08-04.4
- T. Business excluded by the attached Nuclear Incident Exclusion Clauses:
  - Nuclear Incident Exclusion Clause—Physical Damage—Reinsurance—U.S.A., No. 08-33
  - Nuclear Incident Exclusion Clause—Physical Damage—Reinsurance—Canada, No. 08-34.2
- U. Extra Contractual Obligations and Excess of Policy Limits amounts

The foregoing exclusions, other than H., R., S.,T., and U., will not apply when the operations or exposures outlined in those exclusions are only incidental to and a comparatively small part of the original insured's major activities or total operations.

#### **Sample Reports and Remittances Clause**

The Company shall maintain adequate records showing the particulars of the risk ceded and percents reinsured hereunder, and similar records of alterations, cancellations, rearrangements, and additions in which the Reinsurer is interested.

Within 45 days after the close of each month, the Company shall forward to the Reinsurer the following accounting and statistical data in connection with the month's transactions:

- (1) Individual cession data plus summary by major line showing the written or return premium, commission or return commission, paid loss and paid loss adjustment expense, salvages and recoveries falling to the share of the Reinsurer, and balance due to or from the Reinsurer.
- (2) Total amount of outstanding losses and unearned premium ceded hereunder.

The balance due to or from Reinsurer as set out in item (1) above shall be payable within 60 days of the close of the account month.

The Company shall also furnish the Reinsurer at the close of each quarter:

- (1) Its unearned premium by major class,
- (2) Paid loss and loss adjustment expenses by major class and year of occurrence,
- (3) Outstanding losses by major class and year of occurrence, and
- (4) Written premium by major class.

The Company shall also furnish any other information to the Reinsurer as required for the filing of its Annual Statement. In the event of an industry designated catastrophe affecting this Agreement, the Company undertakes to appropriately designate losses paid and outstanding resulting therefrom on its normal accounts.

[DA05356]

# CLAUSES DESIGNED OR ADAPTED FOR SURPLUS SHARE TREATIES

Some clauses are designed or adapted specifically for use in surplus share treaties that enable the treaties to operate as such.

Such clauses in surplus share treaties may include these:

- Surplus liability clause
- Net retention clause
- Retention and limits clause
- Method of cession clause

The sample clauses included in this discussion are for illustrative purposes only and should not be relied on to construct an actual treaty.

# **Surplus Liability Clause**

The surplus liability clause defines the threshold at which the primary insurer will cede its liability to the reinsurer. The clause establishes a cession priority, such as first, second, or third, when several layers of surplus share treaties are used. Not all surplus share treaties have a surplus liability clause. When the clause is not included, the retention and limits clause can describe the cession limits.

4.4

## **Definition of First or Second Surplus**

If surplus share treaties are organized into layers, the primary insurer usually uses the available capacity of the first surplus treaty before it cedes liability to the second surplus treaty, and so on.

In the first surplus treaty, the surplus liability clause states that the surplus liability exceeds the primary insurer's net retention. The exhibit shows a surplus liability clause that designates the surplus share treaty in which it is included to apply as first surplus treaty. See the exhibit "Sample Surplus Liability Clause for a First Surplus Treaty."

#### Sample Surplus Liability Clause for a First Surplus Treaty

The term "Surplus Liability" as used in this Agreement shall mean that portion of the Company's gross liability on any one risk which exceeds the Company's Net Retention.

Edwin B. Barber, CPCU, ARe Reinsurance Consultant [DA05357]

In a second surplus treaty, the surplus liability is the amount of liability that exceeds the primary insurer's net retention plus the cession to the first surplus treaty. A surplus liability clause for a second surplus treaty is shown in the exhibit. See the exhibit "Sample Surplus Liability Clause for a Second Surplus Treaty."

## Sample Surplus Liability Clause for a Second Surplus Treaty

"Second Surplus Liability" shall be defined as that portion of the gross line of the Company that remains on any risk after deducting the net retention of the Company plus the amount of liability ceded to its First Surplus Treaty.

[DA05358]

## **Disclosure of Underlying Reinsurance Agreements**

A primary insurer may reinsure its surplus share treaty's net retention via other reinsurance agreements, such as a quota share treaty, another surplus

share treaty, an excess of loss treaty, or a combination of treaties. Primary insurers reinsure their net retentions for these main reasons:

- To increase net retention to a level greater than their own financial resources may be able to support
- To increase large line capacity available in the surplus share treaty

If a primary insurer does reinsure its net retention, it must disclose the underlying reinsurance agreements in the surplus liability clause of the original treaty.

## **Net Retention Clause**

The net retention clause defines the primary insurer's net retention. The definition of net retention can be contained in a separate net retention clause or included in the definitions clause, the reinsuring clause, or the retention and limits clause of the surplus share treaty. The net retention clause usually states whether or not the primary insurer is permitted to use underlying reinsurance to reinsure its net retention.

The exhibit shows both a clause that does not permit underlying reinsurance (except for catastrophe reinsurance) and one that does permit underlying reinsurance. See the exhibit "Sample Net Retention Clauses."

#### **Sample Net Retention Clauses**

#### **Net Retention Defined Not to Permit Underlying Reinsurance**

The term "net retention" as used herein shall mean the amount of liability on each risk that the Company elects to retain net for its own account and unreinsured in any way, except for catastrophe reinsurance.

#### **Net Retention Defined to Permit Underlying Reinsurance**

The term "net retention" as used herein shall mean the amount of liability on each risk that the Company elects to retain net for its own account. The Company's Per Risk Excess of Loss and Property Per Occurrence reinsurances shall be disregarded in establishing the Company's net retention.

[DA05359]

## **Retention and Limits Clause**

If a surplus share treaty does not include a surplus liability clause, the retention and limits clause can serve the same purpose. The retention and limits clause limits the amount of liability that the primary insurer can transfer to the reinsurer and establishes the primary insurer's minimum net retention. The retention and limits clause shown in the exhibit specifies a \$100,000 minimum net retention plus five lines, with a \$1 million maximum cession for any one loss exposure. See the exhibit "Sample Retention and Limits Clause."

#### **Sample Retention and Limits Clause**

For the purpose of this treaty, cessions to this treaty shall be limited to five (5) times the net retention subject to a maximum of \$1,000,000. Notwithstanding the provisions above, no risk shall be reinsured hereunder on which the net retention of the Company is less than \$100,000.

[DA05360]

Surplus share treaties usually express the maximum cession as a number of lines with a dollar amount as a cap. These treaties can also state the dollar limit on a probable maximum loss (PML) basis. The exhibit shows how the primary insurer's net retention and a maximum cession can be determined by PML. See the exhibit "Retention and Limits—Surplus Share Treaty— Probable Maximum Loss."

Probable maximum loss (PML)

The largest loss that an insured is likely to sustain.

#### Retention and Limits—Surplus Share Treaty—Probable **Maximum Loss**

For the purpose of this Agreement, the First Surplus shall be limited to:

- a. Two (2) times the net retention of the Company where its net retention is between \$100,000 and \$200,000.
- b. Four (4) times the net retention of the Company where its net retention is more than \$200,000.

However, no cession shall be made hereunder for more than \$5,000,000 any one risk nor more than \$1,000,000 Probable Maximum Loss (PML) any one risk.

No reinsurance shall be ceded hereunder on any subject of insurance on which the net retention of the Company at the time of cession is less than \$100,000 any one risk.

The net retention of the Company mentioned herein shall be understood to mean the amount of the net retention subject only to its Property Working Cover and/or catastrophe excess of loss reinsurance.

[DA05361]

A surplus share treaty may include a per occurrence limit to restrict the amount of catastrophic losses indemnified by the treaty and protect the treaty's profitability from an accumulation of catastrophe-related losses. If the treaty includes a per occurrence limit, it is added to the retention and limits clause, and a loss occurrence definition is included in the definitions clause.

## Method of Cession Clause

Surplus share treaties are used to provide large line capacity for complex property loss exposures. Consequently, one purpose of the method of cession clause is to address methods of ceding for policies covering multiple locations, multiple coverage parts, causes of loss insured within sublimits, and loss exposures insured on a blanket basis. A surplus share treaty addresses these typical complexities associated with insuring property loss exposures so that all parties involved agree about what is ceded.

Another purpose of the method of cession clause is to reduce adverse selection by specifying how loss exposures are ceded to the treaty. The method of cession clause in the exhibit illustrates one method for ceding when the loss exposures involved are large and complex. See the exhibit "Sample Method of Cession Clause."

#### **Sample Method of Cession Clause**

30 C

#### METHOD OF CESSION

It is agreed that when perils other than fire are written in conjunction with a fire line, these perils shall not be ceded except in conjunction with the fire line and then, as respects each peril, only for an amount not to exceed the amount ceded on the fire line.

In ceding reinsurance on any policy covering risks at two or more locations, the reinsurance allotted to the Reinsurer shall extend proportionately to all locations. In such a case, the Company shall comply with provisions of the minimum net retention requirement in respect to one location, but shall not be required to do so in respect to the other locations.

In ceding reinsurance on any policy comprising two or more items pertaining to one specific location, the reinsurance allotted to the Reinsurer shall extend proportionately to all such items, unless otherwise presented to the Reinsurer and accepted by it.

When a risk is insured by the Company under more than one policy, the Company shall cede to the Reinsurer all or any part of the last policy or policies issued by the Company on the risk and shall pay to the Reinsurer the same rate of premium received by the Company under that particular policy or policies reinsured hereunder. In the event of loss, the Reinsurer shall participate pro rata in the liability of the Company on the risk in the proportion the total amount ceded hereunder bears to the total liability under all policies on the risk in effect at the time of the loss.

Brokers & Reinsurance Markets Association (BRMA), http://www.brma.org/frommembers/contractword/Method%20 of%20Cession%20BRMA%2030A-C.doc (accessed November 16, 2012). [DA09175]

The method of cession clause states that the primary insurer can adjust the percentage ceded for coverage sublimits, but not to the reinsurer's detriment. For example, a primary insurer issues a commercial property policy for \$1 million that has an earthquake sublimit of \$100,000. The primary insurer's retention is \$200,000 (20 percent). If the primary insurer cedes the same proportion of the liability for the earthquake coverage, it would retain \$20,000 of the liability for that coverage. The primary insurer's underwriter can increase retention on the earthquake coverage and cede less liability to the reinsurer.

However, the underwriter cannot reduce the retention on the earthquake coverage to cede more liability to the reinsurer.

On multiple-location loss exposures, whether insured under one or multiple policies, the reinsurer assumes liability proportionately for all locations. If this procedure results in any of the locations having a net retention less than the treaty's required minimum net retention, both parties would ignore the treaty requirement to maintain the minimum net retention at those locations. However, the primary insurer must comply with the minimum net retention requirement at one location.

# SURPLUS SHARE TREATY PRICING

As with quota share treaty pricing, surplus share treaty pricing depends on the amount of ceding commission the reinsurer is willing to pay to the primary insurer. This amount depends on several factors:

- The treaty's perceived profitability
- The treaty's limits
- The primary insurer's line
- Competition in the reinsurance marketplace

Unlike with quota share reinsurance, in a surplus share treaty, the primary insurer's retention varies with each cession depending on the line selected for and the coverage limit needs of each loss exposure. Therefore, determiningthe appropriate price for a surplus share treaty usually involves thoroughly analyzing the policies that will be subject to the treaty. This is accomplished by using a limits profile. Primary insurers also use limits profiles to evaluate the financial consequences of alternative lines. To specify the maximum amounts of insurance it will provide for particular categories of policies, a primary insurer uses a line guide.

# Limits Profile

A limits profile is a table in which the policies subject to the treaty have been categorized by coverage limit.

The hypothetical homeowners data shown for Blue Granite Insurance Company in the exhibit have policies categorized into \$10,000 intervals for the dwelling coverage limits. See the exhibit "Homeowners Limits Profile for Blue Granite Insurance Company."

Based on these data, the primary insurer and reinsurer can determine the financial effects of a surplus share treaty with the retention set at various levels. The accompanying exhibit to the "Homeowners Limits Profile for Blue Granite Insurance Company" exhibit shows data adjusted to reflect retentions of \$120,000 and \$130,000. See the exhibit "Homeowners Limits Profile and Possible Retentions for Blue Granite Insurance Company."



# Homeowners Limits Profile for Blue Granite Insurance Company

Dwelling	Poli	cies		Premiu	ım
Coverage Limits	Count	Percent*	l	Amount	Percent*
\$100,000-\$110,000	323	0.75	\$	96,900	0.50
\$110,001-\$120,000	402	0.94		130,650	0.67
\$120,001-\$130,000	516	1.21		180,600	0.92
\$130,001-\$140,000	1,602	3.74		600,750	3.07
\$140,001-\$150,000	2,200	5.14		880,000	4.50
\$150,001-\$160,000	4,999	11.68		2,124,575	10.86
\$160,001-\$170,000	15,050	35.15		6,772,500	34.63
\$170,001-\$180,000	10,100	23.59		4,797,500	24.53
\$180,001-\$190,000	1,125	2.63		562,500	2.88
\$190,001-\$200,000	6,500	15.18		3,412,500	17.45
Totals	42,817	100.00%	\$1	9,558,475	100.00%
* Rounded					

[DA05363]

Under the \$120,000 retention scenario, the primary insurer cedes \$5,570,234 of premium (the total of column (4)) to the surplus share reinsurer. Using a \$130,000 retention results in a smaller cession of premium (\$4,430,415, shown at the bottom of column (6)).

If Blue Granite's policyholders' surplus is \$5 million, then without reinsurance, its capacity ratio would be 3.9 to 1 (\$19.5 million  $\div$  \$5 million = 3.9). This exceeds acceptable limits. Blue Granite could use a surplus share treaty with a \$130,000 retention to reduce its capacity ratio to an acceptable level of 3 to 1 ((\$19.5 million – \$4.4 million)  $\div$  \$5 million = 3). Alternatively, it could reduce its capacity ratio to 2.8 to 1 by using a surplus share treaty with a \$120,000 retention ((\$19.5 million – \$5.5 million)  $\div$  \$5 million = 2.8).

## **Line Guide**

A primary insurer uses a line guide as an underwriting tool to specify the maximum amounts of insurance that it is prepared to provide for various categories of policies. Although line guides can be used for both property and liability insurance, most line guides are used for property insurance because total property loss exposures are easier to quantify than liability loss exposures.

Property line guides usually include property loss exposure attributes, such as construction type, occupancy classification, and public protection classifica-



#### Homeowners Limits Profile and Possible Retentions for Blue **Granite Insurance Company**

(1)	(2)	(3)	(4)	(5)	(6)
Dwelling Coverage Limits	Premium Account	\$120,000 Retention Percentage Ceded	Dollar Amount Ceded	\$130,000 Retention Percentage Ceded	Dollar Amount Ceded
\$100,000-\$110,000	\$ 96,900	0,00%	\$ 0	0,00%	\$ 0
\$110,001-\$120,000	130,650	0.00	0	0.00	0
\$120,001-\$130,000	180,600	4.00	7,224	0.00	0
\$130,001-\$140,000	600,750	11.11	66,743	3.70	22,228
\$140,001-\$150,000	880,000	17.24	151,712	10.34	90,992
\$150,001-\$160,000	2,124,575	22.58	479,729	16.13	342,694
\$160,001-\$170,000	6,772,500	27.27	1,846,861	21.21	1,436,447
\$170,001-\$180,000	4,797,500	31.43	1,507,854	25.71	1,233,437
\$180,001-\$190,000	562,500	35.14	197,663	29.73	167,231
\$190,001-\$200,000	3,412,500	38.46	1,312,448	33.33	1,137,386
Totals	\$19,558,475		\$5,570,234		\$4,430,415

#### Notes:

- The percentage ceded is based on the midpoint of the applicable Dwelling Coverage Limits range. It is therefore calculated as: (Midpoint - Retention) ÷ Midpoint.
- 2. Numbers are subject to rounding.

#### [DA05364]

tion. For each class of loss exposure, the line guide indicates a suggested net retention. The primary insurer's reinsurance program typically is based on line guide information.

# **Commercial Property Line Guide**

An example of a simplified commercial property line guide for the hypothetical Blue Granite Insurance Company is shown in the exhibit. Some primary insurers use line guides that also include other elements, such as the number of floors in the structure and how fire walls are used. See the exhibit "Commercial Property Line Guide."

Line guides reflect the construction, occupancy, and public protection classifications of buildings. A building's construction has direct bearing on the extent of damage a fire can cause as well as on the building's ability to resist damage from other causes of loss.



#### **Commercial Property Line Guide**

#### Commercial Property Line Guide Basic Line (\$000)

Construction Type	Pul	olic Protection (	Classification (F	PPC)
-	1–4	5–6	7–8	9–10
Frame	\$40	\$36	\$32	\$28
Masonry REX	45	41	36	31
Noncombustible	50	45	40	35
Fire-resistive	60	54	48	42

#### **Occupancy Modifiers**

Occupancy Class	Modifier
Α	1.00
В	0.90
С	0.80
D	0.70
E	0.60
F	0.50

#### Instructions:

- 1. Select the basic line, based on construction type and protection class.
- 2. Identify the occupancy class and its applicable modifier. Multiply the basic line by the occupancy modifier to obtain the *modified line*.
- 3. Multiply the modified line by 2 for fully sprinklered risks of fire-resistive construction or multiply the modified line by 1.5 for fully sprinklered risks of noncombustible construction to obtain the *modified sprinkler line*.
- 4. Determine the *final line* by reducing the modified line or modified sprinklered line as appropriate for external exposures (such as a petrochemical plant 25 feet away) and for housekeeping and maintenance.

#### [DA05365]

Building construction classifications are typically based on these three essential factors:

- The material used for the load-bearing portions of the exterior walls
- The material used in the building's roof and floors, especially the supports
  of the roof and floor
- The fire-resistive rating of materials used in the building's construction

The simplified line guide in the exhibit uses four building construction classifications: frame, masonry, noncombustible, and fire-resistive. The frame construction classification includes structures that are most susceptible to damage by fire, while the fire-resistive classification includes structures that are least susceptible to damage by fire.

Occupancy refers to the nature of the insured's operations. The occupancy modifiers presented in a line guide reflect hazards inherent in each type of operation. These modifiers are often derived from the Insurance Services Office, Inc. (ISO) occupancy rating system, which indicates the degree of hazard that an occupancy presents in a particular classification. This system uses an occupancy code that considers the loss exposure's basic occupancy, such as if the occupancy is an office, a habitational property, a sawmill, and so on. The basic occupancy charge that is based on the occupancy code is then modified by combustibility and susceptibility of contents' factors, along with any additional occupancy hazards for which surcharges can be imposed.

ISO ranks the combustibility of contents according to five classifications from noncombustible to rapid or flash burning. Measuring the susceptibility of contents is also important, as even contents that do not burn can sustain damage from heat of the fire, smoke, or water used to extinguish the fire. For example, a relatively small and quickly extinguishable fire can produce a large financial loss if highly susceptible contents, such as expensive clothing, furniture, or electronic equipment, lose their value when contaminated by smoke. ISO also ranks content susceptibility through five classifications; these range from minimal damage to extreme loss.

The occupancy classes used in the "Commercial Property Line Guide" exhibit are illustrative, with Class A representing the least hazardous occupancy classification and Class F the most hazardous.

The "Commercial Property Line Guide" exhibit also incorporates the public protection classifications of buildings into groups. ISO independently collects and evaluates information on a community's public fire protection using its Fire Suppression Rating Schedule (FSRS). The FSRS measures the major elements of a community's fire suppression system and develops a numerical grading called a public protection classification (PPC) for each community. The ISO PPC system rates the quality of a public fire service on a scale of 1 to 10. The scale measures the adequacy of the equipment available to the public fire service, the water supply, and response time to properties in a particular area. Class 1 represents the ideal; Classes 1 through 8 apply to properties in protected communities, while Classes 9 and 10 apply to unprotected communities. Properties located too far from a water supply adequate for fire suppression fall into Class 9. Properties that have no public fire protection fall into Class 10. See the exhibit "Commercial Line Guide Examples."

#### Occupancy

The type or character of use of the property in question.

#### Basic occupancy charge

A rating system factor that reflects the relative hazard of an occupancy for pricing purposes and is expressed as a percentage of the base rate (ranges from 10 percent to 1,000 percent).

#### Combustibility

The ability of something to ignite and burn; a major determinant of the overall fire hazard.

#### Susceptibility

The extent to which fire and its effects will cause damage to materials.



#### **Commercial Line Guide Examples**

The following three examples illustrate how a commercial line guide's consideration of construction, occupancy, and public protection class affects an underwriter's decision about setting a loss exposure's final line or net retention. In all cases, assume that the modified line equals the final line. Using the "Commercial Property Line Guide" exhibit, assume that the occupancy modifier Class A is the least hazardous loss exposure, such as an office.

Example 1—If the insurer insures an office in a building of fire resistive construction, located in a community with a PPC of Class 4, the final line would be \$60,000 (\$60,000

Example 2—If the insurer insures an office in a building of frame construction, located in a community with a PPC of Class 7, the final line would be \$32,000 (\$32,000  $\times$  1.00).

Example 3—If the insurer insures a restaurant (occupancy Class F) of brick construction in a community with a PPC of Class 6, the final line would be \$20,500  $($41,000 \times 0.50)$ .

[DA09148]

#### **Homeowners Line Guide**

In a homeowners line guide, public fire protection classification is usually the dominant factor. Homes are owner-occupied, so the occupancy criterion is insignificant. Construction characteristics are seldom considered because most homes are frame (or substantially frame) structures and are 100 percent subject to destruction by fire (100 percent PML).

The exhibit is an illustration of a simplified homeowners line guide for the hypothetical Blue Granite Insurance Company. See the exhibit "Homeowners Line Guide."

Homeowners Line Guide		
Public Protection Class (PPC)	Maximum Line	
1 to 4	\$70,000	
5 and 6	\$60,000	
7 and 8	\$50,000	
9 and 10	\$40,000	

[DA05371]

The examples exhibit illustrates how a homeowners line guide affects the maximum line an insurer is prepared to provide based on the loss exposure's public protection class. See the exhibit "Homeowners Line Guide Examples."

#### **Homeowners Line Guide Examples**

An insurer receives an application for a one-story, two-bedroom, one-bath, frame construction home with a PPC of Class 3. The maximum line, using the "Homeowners Line Guide" exhibit, is \$70,000. The insurer also insures a three-story, five-bedroom, four-bath, frame-construction colonial home with a PPC of Class 10. The maximum line, using the same line guide, is \$40,000. Depending on the number of lines ceded to a surplus share treaty, the insurer may need additional reinsurance to provide the necessary coverage amount.

[DA09149]

# SUMMARY

Surplus share treaties are a type of pro rata reinsurance commonly used in property reinsurance. As with quota share reinsurance, the primary insurer and reinsurer under a surplus share treaty share the underlying policy premiums and losses for each loss exposure on a percentage basis. Unlike with quota share treaties, the percentage of ceded liability varies with each loss exposure. Surplus share treaties provide these main functions for primary insurers: increased large line capacity/stabilized loss experience, and surplus relief. They are used by primary incurers for large, complex property loss exposures and when both large line capacity and surplus relief are needed.

Surplus share treaties contain many of the same types of clauses as other reinsurance treaties. Common clauses modified for use in a surplus share treaty include reinsuring clauses, liability of the reinsurer clauses, definitions clauses, exclusions clauses, and reports and remittances clauses. Each clause provides additional details or clarification regarding the responsibilities of the primary insurer and the reinsurer.

Clauses that are typically designed or adapted specifically for use in surplus share treaties that enable the treaties to operate as such include surplus liability clauses, net retention clauses, retention and limits clauses, and methods of cession clauses.

As with quota share treaty pricing, surplus share treaty pricing depends on the amount of ceding commission the reinsurer pays to the primary insurer. The amount of ceding commission the reinsurer is willing to pay depends on the treaty's perceived profitability, the treaty's limits, the primary insurer's line, and competition in the reinsurance marketplace. Unlike with quota share reinsurance, in a surplus share treaty, the primary insurer's retention varies with each cession depending on the line selected for and the coverage limit



needs of each loss exposure; therefore, determining the appropriate price for a surplus share treaty and evaluating the usefulness of a surplus share treaty with a specific retention requires analyzing the insurance policies that are subject to the treaty using a limits profile. A limits profile can also be used to determine how much premium will be ceded at various retention amounts. A primary insurer uses line guides to communicate and control the amount of liability that its underwriters accept for particular categories of policies.