



Index Methodology Guide

ISE-CCM HOMELAND SECURITY INDEX™

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Chapter 1. Introduction

This document summarizes the methodology and rules used to construct, calculate, and maintain the ISE-CCM Homeland Security IndexTM.

The ISE-CCM Homeland Security Index (ISE-CCM_HSI) provides a sampled, benchmarking system for investors interested in this emerging sector.

Homeland Security is defined in the *National Strategy for Homeland Security*¹ as "a concerted national effort to prevent terrorist attacks within the United States, reduce America's vulnerability to terrorism, and minimize the damage and recover from attacks that do occur." Homeland security includes federal, state, and local governments, the private sector and individual citizens.

Broadly speaking, the Homeland Security Sector is primarily focused on "Physical and Critical Infrastructure Security", however, within this broad mission other significant missions can be extracted to better define the function of companies within the sector. Since the Homeland Security Sector requires collaboration amongst various industries, companies within this new sector are defined by mission as it relates to domestic security.

Homeland Security Missions

- 1) *Intelligence and Warning*: Includes efforts to detect and track potential threats before attacks occur within the United States.
- 2) Border and Transportation Security: Encompasses airline security and inspection of cargo at points of entry into the United States to prevent unwanted individuals or weapons from entering the country.
- 3) Domestic Counterterrorism: Consists primarily of federal law enforcement and investigative activities that center on tracking and apprehending terrorists. Primary responsibility for those activities rests with the Federal Bureau of Investigation (FBI).
- 4) Protection of Critical Infrastructure and Key Assets: Includes the physical security of national landmarks and critical infrastructure (including Cyber Infrastructure) as well as the physical security of federal government buildings and installations.
- 5) Defense Against Catastrophic Threats: Entails efforts to prevent terrorists from obtaining weapons of mass destruction (chemical, biological, or nuclear) and activities to mitigate the effects of such weapons if they are used.
- 6) Emergency Preparedness and Response: Includes efforts to mitigate the effects of future terrorist attacks, including creating federal response plans and providing equipment and training for local "first responders" (in general, local fire, police, and medical personnel who are likely to be first on the scene of a terrorist attack).

The **ISE-CCM_HSI** is calculated and maintained by Standard & Poor's based on a methodology developed by ISE and CCM in consultation with Standard & Poor's.

¹ The National Strategy for Homeland Security, a document published by the Office for Homeland Security at the White House, is the comprehensive plan for using America's resources to enhance protection and reduce vulnerability to terrorist attacks. Published July 2002, http://www.whitehouse.gov/homeland/book/nat_strat_hls.pdf.

Chapter 2. Index Description

The ISE-CCM_HSI is a sampled, fixed-number constituent, modified market capitalization-weighted index that is adjusted for free-float shares. It is a "RIC" (Regulated Investment Company) compliant index of 30 select, small, mid, and large capitalization US companies. These Homeland Security companies are some of the largest, most liquid, and most mature of the entire sector. The index strongly represents, in a balanced fashion, the complete Homeland Security Sector and its related missions. Due to the non-uniform weight distribution across the sector, a "modified" market capitalization-weighted methodology is used to limit individual component weightings to 25%. This modification prevents a few large component stocks from dominating the index and distorting an index return that is representative of an industry sector. The modified approach promotes portfolio diversification by retaining the economic attributes of capitalization ranking.

The ISE-CCM_HSI has been constructed specifically to isolate "Homeland Security Companies" in order to present an accurate and pure representation of the Homeland Security Sector. Defense contractors and large conglomerates have been excluded for reasons of purity, even though they may be a contractor with the Department of Homeland Security and have a presence in the sector.

The objective of the ISE-CCM_HSI is to provide investors with the ability to track the Homeland Security Sector. This is accomplished through ongoing analysis of the benchmark companies included in the Index which are directly involved with Homeland Security, either through contractual work with the Department of Homeland Security, other law enforcement-government agencies, or in the production of products and-or services that meet the needs of Homeland Security, as defined by the Department of Homeland Security and-or the private sector.

The ISE-CCM_HSI is calculated on a price and total return basis. The price Index is calculated in real-time and disseminated via the Options Price Reporting Authority (OPRA) and market data vendors every day the U.S. equity markets are open. The total return Index is calculated on an end-of-day basis. Both sets of values are freely available on ISE's website, www.iseoptions.com.

The Index always contains 30 different component stocks at all times. New companies are added to the Index only when there is a vacancy. Companies may not apply, and may not be nominated, for inclusion in the Index. Companies are added or removed by the ISE and CCM based on the methodology described herein. Whenever possible, ISE will publicly announce changes to the index on its website at least five trading days in advance of the actual change.

Chapter 3. Index Construction

This chapter outlines and defines the key steps in constructing and calculating the index, including: eligibility requirements, formulas, initial component selection, and special adjustments.

3.1. Base Date and Value

The ISE-CCM Homeland Security Index has the following base date and value:

Index Base date Base value

ISE-CCM Homeland Security Index December 31, 1999 50

3.2. Component Eligibility Requirements

All of the following requirements must be met in order for a company to be eligible for inclusion:

- The component security must be U.S.-based. The ISE and CCM use several factors in determining a company's nationality, including, but not limited to: registration location, accounting principles used for financial reporting, and location of headquarters.
- 2. The component security must be a "reported security" as defined in Rule 11Aa3-1 under the Exchange Act, and its common stock listed on the New York Stock Exchange (NYSE), American Stock Exchange (AMEX), or Nasdaq National Market System (Nasdaq).
- 3. The component security's business must fall into at least one of the six Homeland Security Missions.
- The component security must be listed on a major stock exchange for the past 120 days.
- 5. Public float of at least 50% of the stock.
- 6. Must be an operating company and not a closed-end fund, exchange-traded fund (ETF), holding company, investment vehicle, or royalty trust (REIT).
- 7. Component securities that receive Department of Homeland Security contracts are given greater consideration than those without contracts. Department of Homeland Security contracts, as criteria however, are not mandatory.

The following market capitalization, liquidity, and weighting concentration requirements must also be satisfied:

- 1. Each component security has a market capitalization of at least \$100 million.
- Trading volume of each component security has been at least one million shares for each of the last six months, except that for each of the lowest weighted component securities in the index that in the aggregate account for no more than 10 % of the weight of the index, trading volume has been at least 500,000 shares for each of the last six months.
- 3. The lesser of the five highest weighted component securities in the index or the highest weighted component securities in the index that in the aggregate represent at least 30 % of the total number of component securities in the index each have had an

average monthly trading volume of at least 2,000,000 shares over the past six months.

- 4. No single component security represents more than 24% of the weight of the index.
- 5. The five highest weighted component securities in the index do not in the aggregate account for more than 50% of the weight of the index. This particular requirement will be satisfied at least on the first day of January and July of each year. ISE and CCM apply weight-adjustment factors, shown in the equations below, to address component over-weighting.

The ISE and CCM will, in most cases, use the quantitative ranking and screening system described herein. However, subjective screening based on fundamental analysis or other factors may be used, if in the opinion of the ISE and CCM, certain components should be excluded from the index. For example, this may be done to prevent overweighting in a particular Homeland Security Mission.

3.3. Weighting and Float-Adjustment

The ISE-CCM Homeland Security Index is weighted by float-adjusted market capitalization, rather than full market capitalization, to reflect the actual number of shares available to investors. Float adjustments are made using S&P's methodology.

The float-adjusted number of shares for each stock is determined by assigning each stock an availability factor. That factor represents the percentage of shares deemed available (i.e., tradable) on the open market, and is developed by excluding certain types of holdings. Shares may be excluded for three reasons: corporate cross-holdings, private control block holdings, or government holdings. Private control blocks are considered to be any entity acting alone or in concert that possess a holding greater than or equal to 10% of the issue's total capitalization.

3.4. Dividend Treatment

The price indexes do not take normal dividend payments into account. Dividends are accounted for by reinvesting them on a daily basis. ISE-CCM uses the ex-dividend date to determine the total daily dividends for each day. Special dividends require an index divisor adjustment (as described in Chapter 4) to prevent such distributions from distorting the price index.

3.5. Index Equations

The price indexes are calculated using the following basic equations:

$$Index\ Value = \frac{Combined\ Adjusted\ Market\ Value\ of\ All\ Components}{Divisor}$$

or
$$I(t) = \frac{\sum_{i=1}^{n} P_{i}(t) \times S_{i}(t) \times WAF_{i}(t)}{D(t)}$$

where:

 $I_{(t)}$ = Index value at time (t)

 $D_{(t)}$ = Divisor at time (t)

n = Number of stocks in the index

t = The time the index is calculated

 $P_{i(t)}$ = Price of stock (i) at time (t)

 $S_{i(t)}$ = Float-adjusted number of shares of stock (i) at time (t)

WAF_{i(t)} = Weight adjustment factor of stock (i) at time (t)

The initial index divisor is determined using the following equation:

$$D(o) = \frac{\sum_{i=1}^{n} P_{i(o)} \times S_{i(o)} \times WAF_{i(o)}}{I_{(o)}}$$

where:

 $I_{(0)}$ = Base index value at base date (December 31, 1998)

Do = Initial divisor at base date

n = Number of stocks in the index

 $P_{i(o)}$ = Closing price of stock (i) at base date

S_{i(o)} = Float-adjusted number of shares of stock (i) at base date

WAF_{i(o)} = Weight adjustment factor of stock (i) at base date

Changes to the index composition require divisor adjustments in order to retain index continuity before and after specific events (as outlined in Chapter 4 – Index Maintenance). Divisor changes are made according to the following formula:

$$D(t+1) = D(t) \times \frac{\sum_{i=1}^{n} P_{i(t+1)} \times S_{i(t+1)} \times WAF_{i(t+1)}}{\sum_{i=1}^{n} P_{i(t)} \times S_{i(t)} \times WAF_{i(t)}}$$

where:

 $D_{(t+1)}$ = Divisor after changes are made to the index

P_{i(t+1)} = Price of each stock after index changes

 $S_{i(t+1)}$ = Number of shares of each stock after index changes

 $WAF_{i(t+1)}$ = Weight adjustment factor of each stock after index changes

D_(t) = Divisor before changes are made to the index

P_{i(t)} = Price of each stock prior to index changes

 $S_{i(t)}$ = Float-adjusted number of shares of each stock prior to index changes WAF_{i(t)} = Weight adjustment factor of each stock prior to index changes

3.6. Initial Component Selection

The following steps are taken to select the initial components for the ISE-CCM Homeland Security Index.

- 1. Rank all common stocks in the industry by unadjusted market capitalization in descending order
- 2. Remove companies that do not meet the component eligibility requirements
- 3. If a component has multiple share classes, include the most liquid issue for that company and remove the remaining classes
- 4. Select the top 30 companies in the industry by market capitalization
- 5. Screen the top 30 companies to ascertain mission representation
- 6. Make adjustments to ensure all 6 homeland security missions are represented in a balanced fashion.
- 7. Weight the Index by float-adjusted market capitalization, and also adjusting individual weightings such that no component represents more than 24%. Even though the weighting limit is 24% for a single component, all components accounting for over 20% of the index market value are adjusted to 20% to avoid unscheduled rebalancing events.

The index component list is provided in Appendix A.

Chapter 4. Index Maintenance

This chapter describes the circumstances that require index changes, as well as the details on performing those changes.

4.1. Divisor Changes

Changes to the Index composition due to corporate actions or component eligibility changes will require Index Divisor adjustments, as follows:

Component change	Adjustment
Component Replacement	Add market value of company to be added, subtract market value for company to be removed
Share Issuance (when change is ≥ 5%)	Add newly issued shares to existing shares outstanding
Share Repurchase (when change is ≥ 5%)	Subtract repurchased shares from existing shares outstanding
Spinoff*	Subtract the following from the price of the parent company:
	$\left(\frac{\textit{Spinoff stock price}}{\textit{Share exchange ratio}}\right)$
Special Cash Dividend	Subtract special dividend from share price
Rights Offering	Subtract the following from the price of the parent company:
	$\left(\frac{\textit{Price of rights}}{\textit{Rights ratio}} \right)$

Divisor changes are usually made on the date the corporate action becomes effective. For example, ISE-CCM uses the ex-dividend date rather than the payment date to determine when making divisor adjustments.

*Special note on Spin-offs: If a company being spun off is only trading on a "when-issued" basis, the "when-issued" price will be used to adjust the parent company's closing price.

4.2. Details of Share Changes

The number of common shares outstanding for each component stock is reviewed every Friday. Share changes of less than 5% are updated on a quarterly basis, becoming effective after the close on the third Friday of March, June, September, and December. The Index Divisor is adjusted at that time to compensate for such share changes. Whenever possible, changes are announced on ISE's publicly available website at least five trading days prior to the effective date.

Share changes greater than 5% are adjusted after the close on the Wednesday of the following week. The Index Divisor change also becomes effective after the close on that day. Whenever possible, changes are announced on ISE's publicly available website at least one trading day prior to the effective date.

Unscheduled share changes due to corporate actions may be processed the same day they are announced, depending on the time the details are received by Standard

& Poor's. In such cases, the Index Divisor changes may become effective that same day, and immediately announced on ISE's publicly available website.

Stock splits and reverse splits do not require Index Divisor adjustments because the corresponding change to the stock price equally offsets the number of shares outstanding, therefore not affecting the component's market capitalization.

4.3. Component Changes at Semi-Annual Review

Each component's eligibility and ranking is reviewed in June and December according to the procedures below. Component changes are made after the close on the third Friday of June and December, and become effective at the opening on the next trading day. Changes are announced on ISE's publicly available website at least five trading days prior to the effective date.

- 1. Rank all eligible stocks in the Index by market capitalization using the requirements of Chapter 3.2
- 2. Rank all component stocks in the Index by market capitalization
- 3. Remove any component stock that fails to meet the eligibility requirements
- 4. Remove any component if it has accumulated 10 consecutive non-trading days between review periods
- 5. Add any non-component stock that meets the eligibility requirements, such that the total number of components is 30
- 6. Adjust the market capitalization of any component representing more than 24% of the index weight such that it represents no more than 20% of the index weight
- Adjust the market capitalization of the five highest weighted component stocks in each index such that they account for no more than 50% of the index weight in aggregate

4.4. Interim component changes

Component changes may occur between review periods if a specific corporate event makes an existing component ineligible. The following events may require a component's replacement:

Event	Action
Merger or acquisition	If a merger or acquisition results in one component absorbing another, the resulting company will remain a component and the absorbed company will be replaced. If a non-component company absorbs a component company, the original component will be removed and replaced.
Spin-off	If a component company splits or spins off a portion of its business to form one or more new companies, the resulting company with the highest market value will remain a component as long as it meets the eligibility requirements. The remaining companies will be evaluated for eligibility and possible addition to the index.
Bankruptcy	A component company will be removed and replaced immediately after bankruptcy filing. Exceptions are made on a case-by-case basis. For example, a security might not be removed immediately when a bankruptcy filing is not a result of operating or financial difficulties.
Delisting	A component company will be removed and replaced immediately after being delisted from its primary market.

ISE and CCM maintain a Component Replacement Pool (CRP) for the index at all times for contingency purposes. The CRP contains at least five companies that meet the eligibility requirements and are ranked by float adjusted market capitalization. Components removed from the Index are replaced with those from the CRP in descending order by float adjusted market capitalization.

Whenever possible, interim component changes are announced on ISE's publicly available website five trading days prior to component changes becoming effective.

4.5. Unscheduled component weight adjustments

Unscheduled component weight adjustments may occur between review periods if any component accounts for more than 24% of the index weight. The market capitalization of any component representing more than 24% of the index weight will be adjusted such that its new weight is no more than 20%. Whenever possible, unscheduled component weight adjustments are announced on ISE's publicly available website five trading days prior to the adjustments becoming effective.

Chapter 5. Index Calculation and Dissemination

This chapter summarizes calculation and dissemination practices, quality assurance practices, and the circumstances requiring calculation corrections.

5.1. Price Calculation

Price and total return indexes for the ISE-CCM_HSI are calculated by Standard & Poor's. The price index is calculated on a real-time basis, and the total-return Index is calculated and disseminated on an end-of-day basis. The ISE-CCM_HSI is calculated using the last traded price for each company in the Index from the relevant exchanges and markets.

Index values are rounded to two decimal places and divisors are rounded to 14 decimal places.

5.2. Calculation Frequency and Dissemination

The ISE-CCM_HSI price index is calculated on a real-time basis beginning when the first traded price of any of the Index components is received by Standard & Poor's. Prices are delivered to ISE every 15 seconds and subsequently published to the Options Price Reporting Authority at that frequency. Total-return Index values are posted on ISE's publicly available website, www.iseoptions.com.

If trading in a stock is suspended prior to the market opening, the stock's adjusted closing price from the previous day will be used in the Index calculation until trading commences. If trading in a stock is suspended while the relevant market is open, the last traded price for that stock will be used for all subsequent Index calculations until trading resumes.

5.3. Input Data

Standard & Poor's uses various quality assurance tools to audit, monitor, and maintain the accuracy of its input data. While every reasonable effort is taken to ensure high standards of data integrity, there is no guarantee against errors. Please refer to the Data Correction section for more detail.

The index closing price is calculated using the closing prices issued by the primary exchange for each component stock in the index. If the primary exchange changes the closing price of a component stock, the new price will be used to calculate the index closing price. A final check of closing prices is done between one hour and one and one half hours after the close of markets. This timeframe may be expanded at S&P's discretion on days where trading volume is unusually large at the close. For example, futures and options expiration dates, and large index rebalancing dates often result in unusually large volume. Only changes received prior to this final check are used in the closing price calculation.

5.4. Data Correction

Incorrect index component data, corporate action data, or Index Divisors will be corrected upon detection. If such errors are discovered within five days of occurrence, they will be corrected that same day. If discovered after five days,

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adjustments will be handled on a case-by-case basis depending on the significance of the error and the feasibility of a correction. Announcements will be made on ISE's publicly available website prior to the change becoming effective.

Incorrect intraday index tick data will not be corrected. However, incorrect opening and closing values will be corrected as soon as possible after detection.

Appendices

This section provides additional information related to the ISE-CCM Homeland Security index in particular as well as changes to this document.

Appendix A. ISE-CCM Homeland Security Index Components

<u>Symbol</u>	Component Name	Rank in Index
LLL	L-3 Communications Holdings	1
MFE	McAfee Inc	2
TMO	Thermo Electron Corp	3
CHKP	Check Point Software (US)	4
HRS	Harris Corp	5
ZBRA	Zebra Technologies Corp A	6
UIS	Unisys Corp	7
CAI	CACI Intl Inc A	8
FLIR	FLIR Systems Inc	9
STE	STERIS Corp	10
MSA	Mine Safety Appliances	11
TTN	Titan Corp	12
TASR	Taser International Inc	13
RSAS	RSA Secuirty Inc	14
ANT	Anteon Intl Corp	15
ISSX	Internet Security Systems	16
TTEK	Tetra Tech Inc.	17
WGII	Washington Group Intl Inc	18
SRX	SRA Intl Inc A	19
IDNX	Identix Inc	20
CPHD	Cepheid Inc	21
VRNT	Verint Systems Inc	22
MANT	Mantech Intl Corp A	23
ACTI	Activcard Corp	24
APSG	Applied Signal Technology Inc	25
OSIS	OSI Systems Inc	26
RAE	Rae Systems Inc	27
SINT	SI International Inc.	28
VISG	Viisage Technology Inc	29
HEPH	Hollis-Eden Pharmaceuticals	30

Appendix B. Document Change History

A history of significant changes to this document is shown in the table below.

Issue	Date	Change
0.1	February 4, 2005	First draft
0.2	February 10, 2005	Second draft
0.3	March 18, 2005	Third draft – portfolio added
1.0	April 12, 2005	Fourth draft – added base date and value

