

# Update: CCRO Survey of Risk Management Practices:

## Draft for CCRO Survey Leadership Team Discussion

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# Session Overview

- Status of the 2017 Survey of Risk Management Practices
- Focus on Compliance Scope and Baseline
- Focus on Compliance Survey Results
- Next Steps and Call to Action

# Executive Summary

The survey working group is excited to find a valuable current practice knowledge base and unique source of benchmarks specific to energy while finalizing our draft report of survey results analysis.

## Background of Survey

- ✓ First survey of risk practices successfully published in 2014, positive and constructive feedback.
- ✓ Members resolved to refine and conduct expanded survey in 2017
- ✓ Publication scheduled for 2018
- ✓ Drafting of current findings is a work in progress

## Participation:

- ✓ ~31 organizations participated in the 2017 survey
- ✓ Survey was limited to one response per organization to control bias
- ✓ Certain questions were refined and defined during the process

## Drafting:

- ✓ We are currently in a “round robin” drafting process with advisors and members
- ✓ There is a separate folder in place on the CCRO website for document sharing
- ✓ Significant progress has been made on 5 of 8 chapters

## Next Steps:

- ✓ Complete Survey & Storylines
- ✓ Conduct Workshops

# Background: Purpose of Survey

The CCRO members developed this survey with two primary objectives:

- ✓ Objective 1: Create an authoritative industry report that can be leveraged as a benchmarking resource by risk management professionals to shape their organization's risk management practices.
- ✓ Objective 2: Identify gaps in our industry practices where CCRO sub-committees may publish recommendations for improvement.

# Background: Value Proposition

Making this survey most distinctive are three foundational characteristics:

- ✓ The survey is sharply focused on energy risk management organizations.
  - This “energy industry only” focus allows much more relevant questions and conclusions than possible with typical surveys that aggregate many industries.
  
- ✓ The questions were developed by Chief Risk Officers and other senior risk management professionals in the CCRO membership.
  - This “practitioner design” ensures that the issues addressed are those our industry most needs information to make operations more efficient and risk practices more effective.
  
- ✓ Survey responses are controlled so that each responding entity is a single aggregate response.
  - This limits duplicative answers within a single organization. Thus, avoiding a problem commonly found in broadly distributed public surveys.

# Background: The 2017 Survey Content

The 2017 survey is divided into 7 topic areas, comprised of 17 survey sections:

- **Company Demographics**
  - Company Characteristics
  - Company Geography
  - Company Scale
- **Characteristics of the Risk Function**
  - Purview
  - “Complexity”
- **Governance**
  - Functional Organization
  - Governance
  - Risk Capital Allocation
- **Compliance**
  - Compliance
  - Regulatory Compliance
- **Risk Analysis**
  - Market Risks
  - Risk Metrics
  - Risk Reporting
- **Credit**
  - Credit Operations
  - Credit Practices
  - Credit Systems
- **Compensation**
  - Compensation
- **Technology**
  - Information Technology for Risk



# Status: Drafting of Detailed Report is Underway

Chapter	Data Processed	Member Review	First Draft	Edit & Refine	Final Draft
Demographics	Complete	Complete	Complete	In Progress	
Risk Function	Complete	Complete	Complete	In Progress	
Governance	Complete	Complete	In Progress		
Compliance	Complete	Complete	In Progress		
Risk Analysis	Complete	In Progress	In Progress		
Credit	Complete	Complete	Complete	In Progress	
Compensation	Complete	In Progress			
Technology	Complete	Complete	Complete	In Progress	

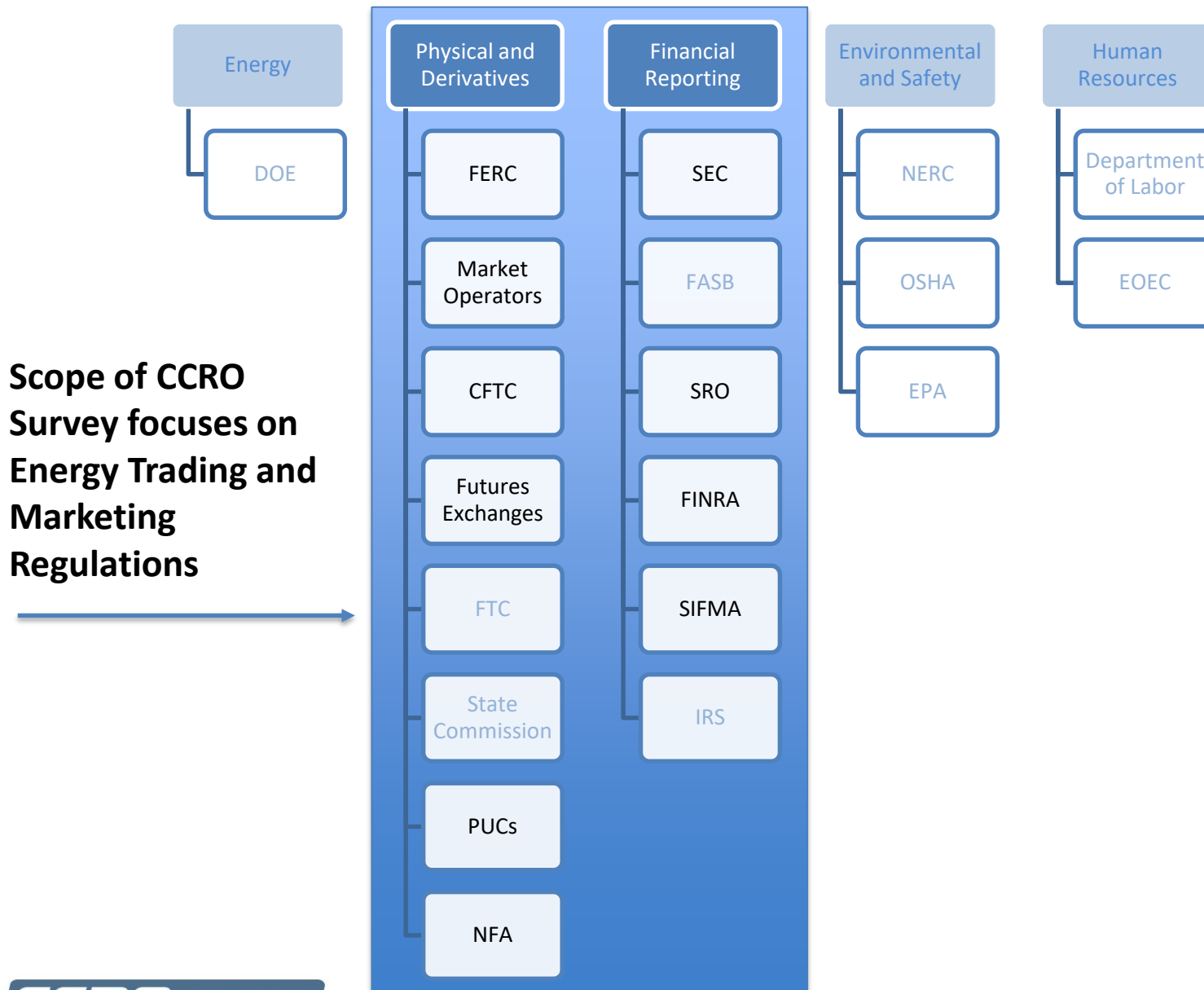
Key: ■ Complete ■ In Progress

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CCRO Risk Organizations Survey 2017



# Compliance Insights: Scope of Compliance (US)



# Compliance Insights: FERC Compliance Guidance

## FERC defines Effective Compliance Practices in November 2016 Whitepapers

### Structure and Composition of Company Compliance Function

- Working knowledge of day-to-day business operations
- Empowering compliance through direct report to the CEO
- Improved industry networking with compliance peers
- Appropriate funding

### Programs and Priorities within Human Resources

- Background checks on new and existing traders
- Align trader incentives with good compliance practices
- Compliance personnel on the trading floor
- Staff rotation into a compliance function

### Types of Compliance Training

- Tailored training to size, specific trading activities & trading experience
- Frequent training that use a variety of training styles
- Mandatory, performance incentive aligned training
- Avoid long, standardized, annual training sessions delivered by attorneys

### Adequate Technological Resources Provided to Compliance Unit

- Implement systems to monitor trading activities
- Invest in systems to detect violations and market manipulation
- Regularly evaluate and update supporting technology systems
- Record keeping and data retention (for at least five years)

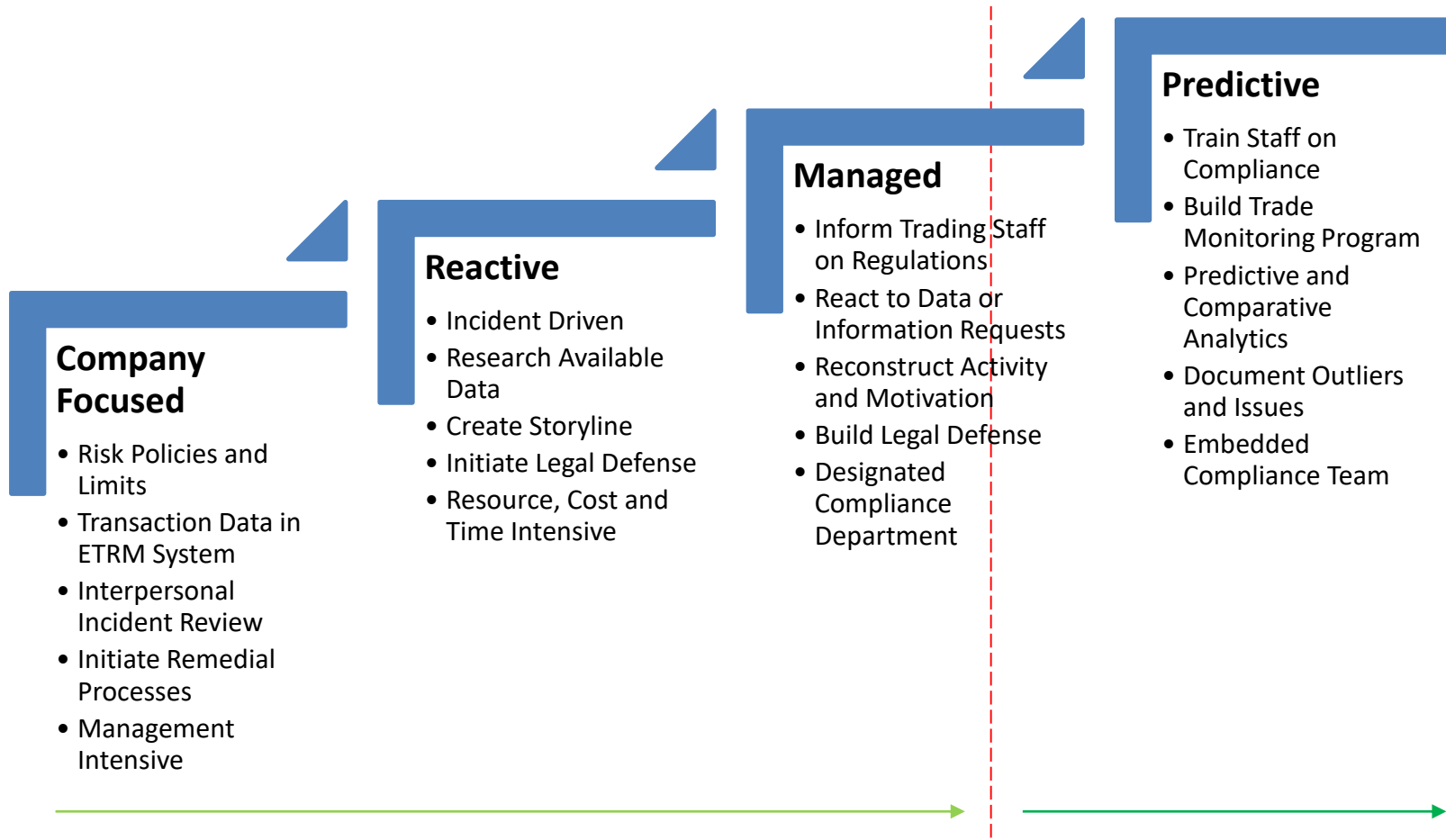
### Establish Rules and Restrictions

- Maintain a list of prohibited transactions
- Document trading strategies
- Require approval before trading new products or at locations/indices

White Paper on Effective Energy Trading Compliance Practices, FERC 11/17/2016

# Compliance Insights: Compliance Maturity Scale

Trade Monitoring should require migration from an ad-hoc and reactive compliance framework → to one that proactively managed, collaborative and predictive



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# Compliance Insights: Regulatory Guidance

## Uneconomic Conduct in Price Setting Instruments

- Cross Instrument (financial to physical, parent to child)
- Virtuals vs. FTRs
- Cross Location/Basis Positions
- Wash Trading

## Speculative Price Taking that Targets Manipulation

- Perversely Trading Above or Below Range
- Disproportionate Positions
- Sustained Losses in Price Setting Instrument
- Leverage through Options or Offsetting Basis Spreads

## Concentration of Trading Activities to Set Prices

- High Concentration During Trade Windows (Open/Close)
- Trades/Position as % of Market
- Exceeding Intra-Day or Exchange Position Limits
- *Spoofing*

## Intentionally Providing Inaccurate Information

- Irrational Information Submitted to ISO/RTOs
- Irrational Natural Gas Nominations
- Withholding Generation/Uneconomic Storage
- False Index Price Reporting

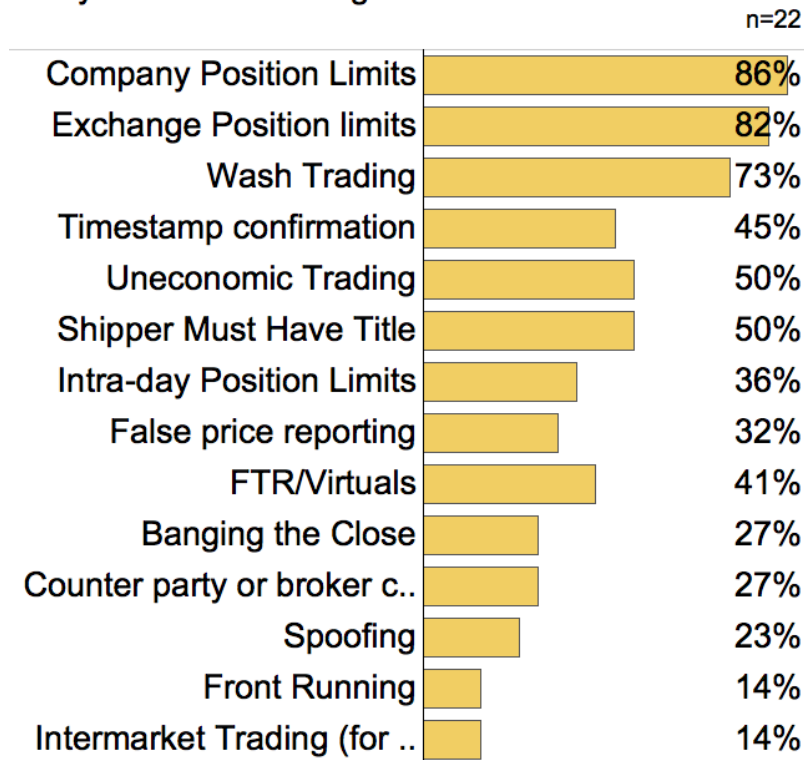
# Survey Insights: What Are Others Doing?

Trade Compliance Monitoring is lagging recommended maturity scales despite fines, penalties, and sanctions for inadequate oversight, violations and intent.

## Observations:

- Legacy position limits monitoring is most widely adapted
- Wash Trading is monitored, however..
- Timestamps are not reconciled
- False price reporting monitoring continues to lag despite severity of penalties
- Spoofing is not getting enough focus given the recent attention by regulators and exchanges
- Almost no effort is being put into Inter-Market (Cross Market/Phys to Financial) market manipulation

16.7) Do you have regulatory compliance monitoring and reporting system(s) or other methods for analysis of the following?



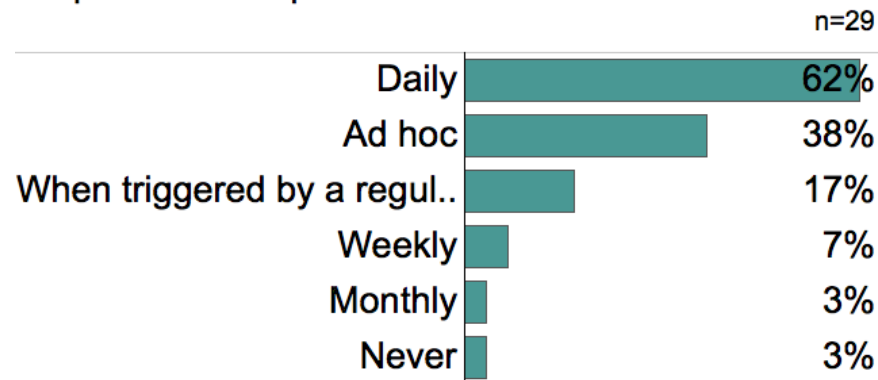
Source: Committee of Chief Risk Officers 2017 Risk Management Benchmarking Survey

# Survey Insights: Frequency of Compliance Monitoring

Compliance Monitoring is improving, but inadequate when paired with other data.

- Trade Monitoring should be proactive, on-going, intra-day, and post transaction
- Trade Monitoring and Surveillance
  - New Transaction and Strategy Review
  - Advancement of Algorithms and Screens
  - Case Management and Documentation

## 16.8) How frequently do you evaluate transactions for potential compliance violations?

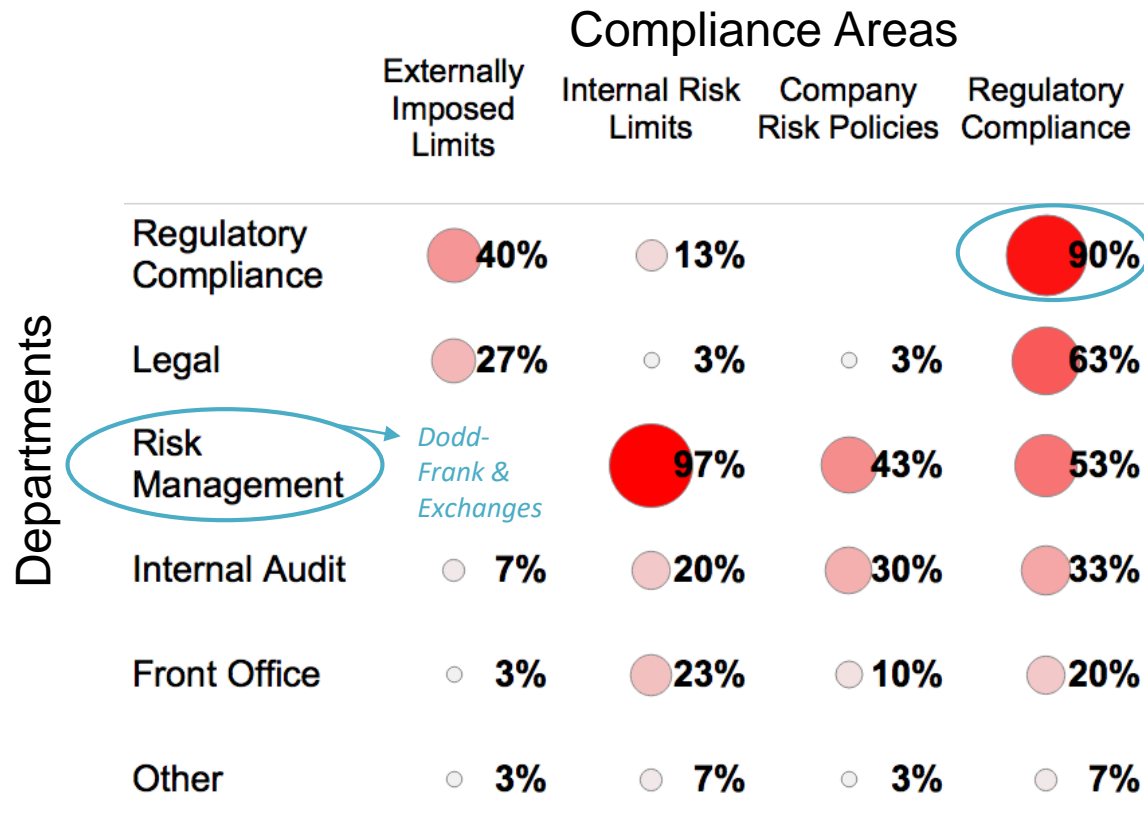


Committee of Chief Risk Officers 2017 Risk Management  
Benchmarking Survey

# Survey Insights: Intersection of Compliance and Risk

Risk Management and Regulatory Compliance are typically to distinct functions.

- Oversight of Regulatory Compliance is shared across functions
- Oversight of Compliance with Company Policies is not migrating to Compliance



Source: Committee of Chief Risk Officers 2017 Risk Management Benchmarking (30) Respondents)

# Survey Insights: Considerations for Staffing

## Common practice is a compliance and reporting staff of 1-3 FTEs

- Are resources allocated adequately?
- Is there a culture of compliance?
- Are 1-3 resources adequate?

		0 to 1	>1 to 3	>3 to 5	>5 to 10	>10 to 20	>20
Oversight of Regulatory Compliance	Larger		14%	57%	29%		
	Medium	7%	57%			14%	21%
	Smaller	20%	80%				
Regulatory Reporting	Larger		14%	43%	14%	29%	
	Medium	14%	43%	7%	14%	7%	14%
	Smaller	40%	60%				

Source: Committee of Chief Risk Officers 2017 Risk Management Benchmarking Survey  
 Company size class by \$B Revenue: Smaller < 1, Medium 1 – 8, Larger 8 - 25 ; n= 9, 15, 7 respectively



# Survey Insights: Compliance Systems

Most compliance activities rely on MS Excel spreadsheet analysis and not enterprise systems.

## Observations:

- Few have third party software
- Few have automated data processing
- Most rely on ad-hoc analytical process
- Most rely on spreadsheets or limited function of ETRM systems capabilities
- Market leaders have custom built or third party systems with real-time flags and the ability to develop screens and case management

### 15.1) Which functions in the commodity transaction lifecycle are managed with what type of system?

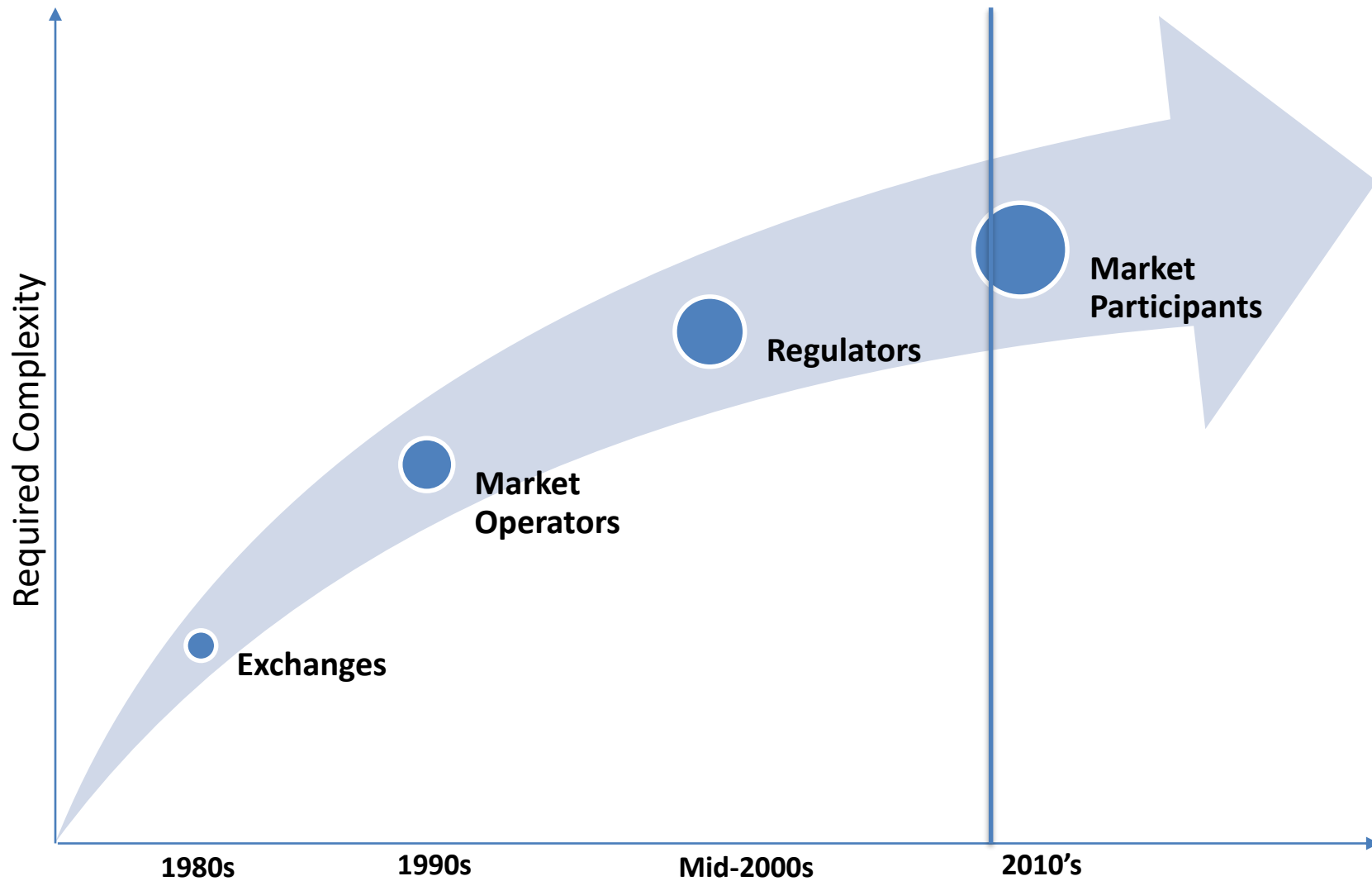
Pick-one, % of responses for each function, n=30

		Spread Sheets	ETRM system	Special third party systems	Custom-built systems
Traders (19)	Company Compliance Reporting	63%	6%	25%	6%
	Regulatory Compliance Reporting	63%	6%	31%	
	Trade Surveillance	38%	19%	31%	13%
Other	Company Compliance Reporting	80%			20%
	Regulatory Compliance Reporting	73%		18%	9%
	Trade Surveillance	50%	30%		20%

Source: Committee of Chief Risk Officers 2017 Risk Management Benchmarking Survey

- Three of seventeen functions included in report are shown here for purpose
- “Trader” companies reported asset-based and/or proprietary trading businesses

# Conclusion: Slow Adaptation of Trade Monitoring



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# CCRO Survey: Next Steps

- Complete Drafting
- Conduct Energy Risk USA Workshop
- Develop Storylines Blogs and Whitepapers
- Present to Membership and Non-Member Respondants
- Market to Broader Energy Risk Management Community