

Market Data Compliance Services

DataCompliance LLC

Introduction

Being licence compliant is expensive, not being licence compliant is much more expensive. A **good** data governance programme with minor flaws can and does lead to **large potential licensing liabilities**. A **bad** data governance programme can and does lead to even larger dollar liabilities.

In the market data world, over a three year audit period, **the potential for a business to accumulate licensing liabilities is significant.**

Why do Audits happen?

Data is valuable

Mission Critical. Efficient tracking of data pathways creates understanding of creation, ingestion, consumption and distribution by feeds, systems, applications, and terminals in all its different frequencies and formats, e.g. real-time, derived, delayed.



Resolutions

Identify, understand why, then eliminate any, and every, errors of non-compliant usage and distribution.



Reporting methods

Accuracy. Even today market data reporting can be based upon manual processes, declarations and 'honesty statements'. Auditing is therefore a natural part of the process, i.e. identifying any potential errors.



Effective communication

Process management. Enabling better policy management by understanding and implementing best practice on-going compliance.



Dollar Facts

The following are examples of average liabilities banks incurred between 2014 and 2017 after exchange audits:

Tier 1 Investment Bank: **\$16 Million**

Tier 1 Global Bank: **\$10 Million**

Tier 2 Global Bank: **\$7 Million**

Tier 2 Domestic Bank: **\$4 Million**

Our approach

As data is utilised further away from sources, the control of, monitoring of, and sight of usage, diminishes so creating potential licensing liabilities. DataCompliance uses this knowledge to help guide our approach to market data compliance policy management.

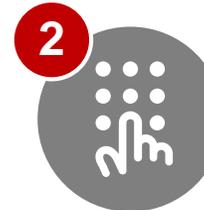
The following are **four key areas** for our service:



1

In-House Usage

Focusing on electronic trading services, all other display & non-display applications data derivation, original works creation and terminal based applications.



2

Reporting Systems

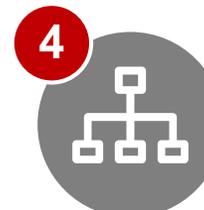
Data usage in risk management systems, portfolio management systems, client reporting, regulatory reporting and in-house data storage.



3

Data Tools

Consists of data reporting tools, permissioning and entitlements alongside data inventory management.



4

Data Re-Distribution

Encompasses redistribution to external and internal sources. This increasingly involves third party data processing typically by ISVs.

Note: This should include all data sourced from exchanges, brokers, other sources, and original works creators (Indices, ETFs & Structured Products) distributed to and by all vendors, sub-vendors, ISVs and end user firms, real time and non-real time data, alongside data used for pricing and reference services, including historical, derived, retail, professional, intra/extranet.

Why DataCompliance?

Market data compliance is a **two way conversation**. DataCompliance effectively communicates between data sources, exchanges and our client, providing a willingness to listen, and a sensible approach thus bringing a new strength to the relationship. This methodology has been based on DataCompliance's extensive licensing management and auditing experience.

Market Data Expertise

DataCompliance has extensive experience in the field of market data. This includes real world business usage, data governance, contract management, sourcing, cost optimisation and exchange data management. We draw upon our experience to provide significant value.

Technical Knowledge

An in-depth understanding of the systems and management processes required, including regulatory workflows, enterprise strategy and reporting data governance.

Diplomacy

The ability bring two parties together when negotiating potential liabilities introduces new dynamics. When required an audit defence is a negotiation between two parties; effective negotiation is a core audit defence strategy facet.



Contractual Knowledge

Expert understanding of the policies and agreements in place is a prerequisite. Experience enables us to provide interpretational analysis of policies and contracts on a policy-by-policy basis, and their practical application with peer groups.

Communication

Effective communication between parties is a requirement. We will agree upon a communications strategy.

Clarity

Market data policies can be misunderstood, also wilfully misunderstood, even by those applying them. So transparency, and flexibility in interpretation and the explanation of findings is a necessity. The ability to be candid, concise and accurate, is supported by effective communication skills, contractual and technical knowledge.

Our principles

There are **key compliance and audit principles** which work toward the successful conclusion of each management review, analysis and audit, contributing to risk reduction and dollar mitigation. At DataCompliance there are no conflicts of interest.

Neutrality



DataCompliance works with industry participants. The consultants will protect confidential information and not prejudice the client in any audit defence.

Conflict of Interest



Any potential conflict of interest will be made known to all parties before any project work can commence.

Liability Calculations



Based on information made available, each liability calculation must be as accurate and exact as possible for internal assessment or for any audit periods under examination. DataCompliance verifies and validates all potential liabilities found externally and internally.

Exceptions



Analytical extrapolations may be required and analysed if insufficient information is made available. Each extrapolation calculation must be reasonable, explained and clear.

Requests for Information



All information requested must be made available in a timely manner with set deadlines. Reasonable request for delays are acceptable subject to an agreement from yourselves.

Audit Negotiations



Discovering correct potential liabilities by internal assessment or for an entire period reduces the requirement for negotiation by our clients, therefore this must be the objective. DataCompliance validates the correct and proper application of policies by each of the clients' data providers.

Audit Client Interaction



At all stages, all the parties involved must be kept informed of progress in a timely manner, and of any issues addressed at the point of occurrence or knowledge.

Audit Timeframes



Audits, internal and external, are a drain on resources for all parties, therefore it is imperative to ensure a timely and accurate completion with recourse to debate and negotiation.

On-going Relationships



Each party must retain on-going relationships; each audit must be conducted on the basis of protecting and enhancing these relationships. Fairness of application is fundamental.

The **five phases** outlined in the timeline are expanded upon below

1 Audit Planning

- Prepare for the internal and/or external audit by reviewing the applicable policies chronologically and the nature of the requirement.
- Set deliverables and assess project requirements.
- Set criteria for success and end state.

2 Discovery

- Analyse all internal documentation, and external documentation where available.
- Cross check data source and vendor records.
- Understand our clients' business relative to their markets, how they trade, their market data environment, which re-distribution channels are used and how subscription levels.
- Identify key internal relationships, and stakeholders.

3 Auditing

- DataCompliance Market Data Compliance Dashboard visualises compliance analysis from start to finish.
- Prepare final internal analysis and audit checklist.
- Identify risk factors alongside identifying any exceptions as well as identify and report data usage outside of data policies.
- Conduct technical and analytical audits where usage can be clearly documented through the use of entitled systems.
- Conduct a non-technical audit where usage cannot be physically measured.

4 Feedback and Follow up

- Interpret and extrapolate all findings.
- Produce interim report which identifies all outstanding issues.
- Work with the client to mitigate and eliminate all outstanding issues.
- Identify and advise on implementation of best practice solutions.
- Assess management and relationship. Are there areas for improvement?

5 Conclusion

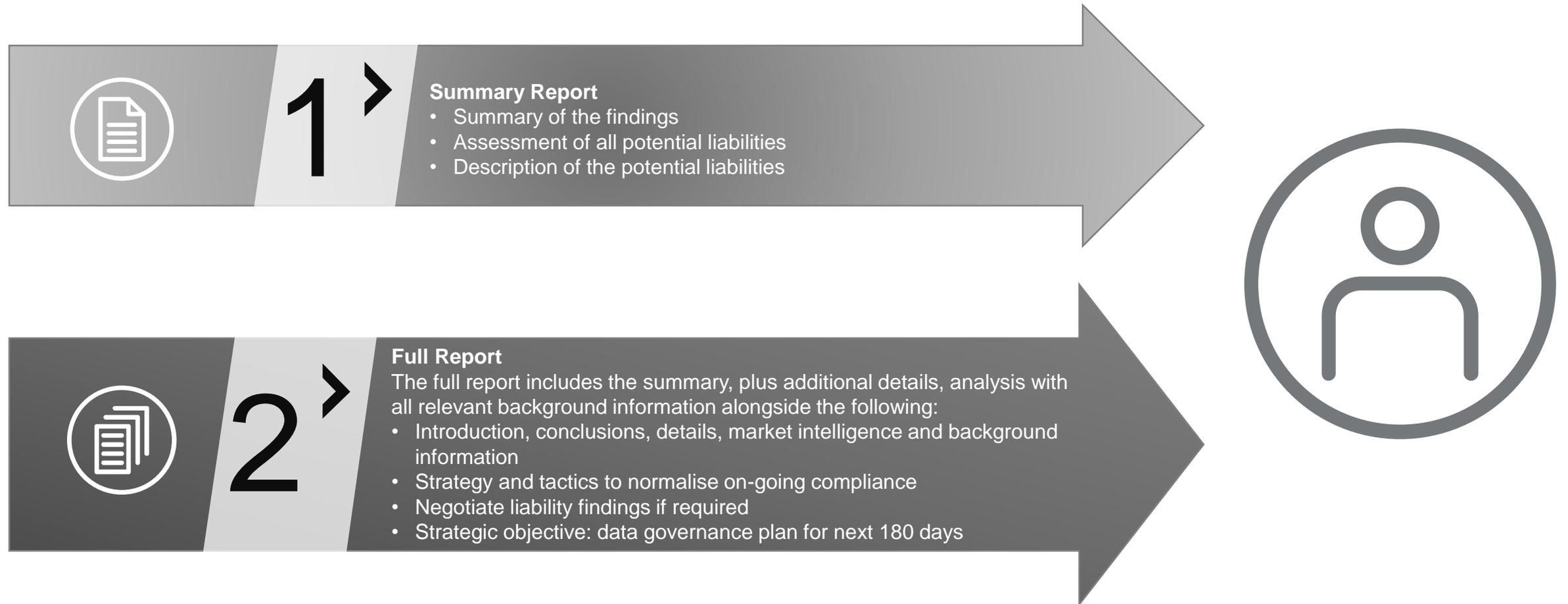
- Produce final report identifying successful resolutions of issues raised in the interim report.
- Document if the analysis and audit did not meet the success criteria. If it did not, address why it did not and provide recommendations moving forward.
- Final report is aimed at delivering best practice future compliance management.



A 'live' dashboard for a 'live' environment

Our deliverables

A clearly defined report structure comprising the following. For each analysis and audit there are **two reports**:



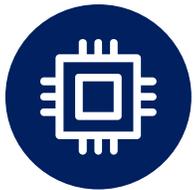
The analytical process

DataCompliance undertakes due diligence by requesting key documentation and information in advance of our analysis. This streamlines the process and creates the evidence.



Documents and Processes

- Entitlements/Permissioning. Review of systems diagrams, and usage reports for the control of, monitoring of, and reporting of usage.
- Identify how data services are documented and codified internally



Explanations

- Review external assessments of potential liabilities, including validation and verification of the correct application of policies and the calculated findings if required.
- Review existing management processes and procedures.
- Analyse invoicing, mapped to reporting.
- Technical explanations as to how the permissioning and distribution systems function and connect to service facilitators/end-users (documented) with a practical demonstration to validate access.
- Access to the enablement/permissioning database to check against what has been reported previously.
- Access to documentation detailing how data is coded for sales/reporting purposes.
- Is, or has in the past, any usage which for whatever reason has not been reported? If so, why?
- When are the cut-off times for reporting?
- Information on how many internal IDs are being used at service facilitators' or within the business for different purposes.

The benefits

1. As part of the analysis/audit, DataCompliance reviews best practice data governance and identifies potential dollar liabilities based on available information. Creation of compliance and liability benchmarks.

1.
Correct and fair
payment for
licensed data

2.
Increased data
utilisation for
the business.

2. Elimination of any discrepancies in usage, leads to Data Sources/Exchanges receiving the correct and fair payment for licensed data while maximising data utilisation for the business, while minimising costs and dollar liabilities.

3. Best practice sourcing. Access to usage policies and licences are critical. Assessment of actual compliance within the contractual framework in place.

3.
Sourcing.
Access to
licences and
policies.

4.
Workflow
efficiency
Assessment of
management
controls

4. Assessment and certification of data management and technical controls and processes to ensure continuous compliance. Maximisation of workflow efficiency.

5. Advising our clients on contractual clarification, definitions, terms and conditions, considering that exchanges and data sources lack common standards.

5.
Contractual
standards and
client guidance

6.
The value of
good data
governance.
Process and
procedure.

6. Maximising value in data usage, minimising and eliminating audit liabilities either through audit defence or internal identification of potential liabilities is built upon good data governance foundations.

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Success Stories

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These are 3 case studies of 3 previous projects. DataCompliance will provide more case studies upon request.



Client: Tier 1: UK Commercial Bank

Project Scope: Data Governance & Services Application Usage Review. Analysis of the client's enterprise usage of Market Data within applications (i.e. Risk, Trading Platforms, Venues, Client and Regulatory Reporting), assess costs and identify potential non-compliant usage, and review data governance of market data services including pre- and re-qualification of data.

Key Achievements:

- Identified £5.5 million of liabilities (subsequently proven to be 92% accurate).
- Identified control, monitoring and reporting deficiencies.
- Proposed changes to management and administration structures.



Clients: Tier 1 US Investment and Retail Bank, Buy-side Fund and Global Energy Bank (aggregation of three projects)

Project Scope: Vendor Migration & licence Sourcing. On boarding new primary Tier 1 market data vendor, Migration of three vendors into one vendor, and Renegotiation of primary and secondary vendor licensing and sourcing.

Key Achievements:

- Saved 11.6% from annual vendor costs.
- Mitigated 59% of potential non-licensed usage.
- Migration delivered on time and to budget without a single day of overrun.
- Retained by client for 24 months of support.



Client: Tier 1 US Investment Bank

Project Scope: Data Governance & licence Sourcing. Conducting a comprehensive assessment of the client's Market Data requirements and strategy to maximise utilisation and value to the business and company. Specific emphasis on client and regulatory reporting, discretionary spend, indices, and evaluated pricing services.

Key Achievements:

- Identified 26% savings on Market Data costs.
- Proposed new management and data governance policies for transparent oversight of business critical services.
- Identified upcoming and proposed regulatory initiatives and changes directly likely to impact the client's business and its management of Market Data.
- Provided a segmentation of each individual service based on the business need for that service, its utility, and business risk of having, or not having, access to the service.