Trade, Trafficking and Technology:
The ongoing fight against financial crime
The world is more interconnected than ever. Supply chain disruptions even in the most remote parts of the globe can cause ripple effects that reverberate throughout other economies.

These examples highlight the essential role of the supply chain in keeping goods and services flowing smoothly and how easily it can be thrown off track. In addition to natural disasters, regulatory actions such as sudden changes in sanctions or restrictions of certain goods can also have a crippling effect.
The U.S. Office of Foreign Assets Control (OFAC) and the European Commission, which are two of the most influential governmental bodies administering and enforcing sanctions, are increasingly focused on the entirety of a company’s supply chain. Companies are being held to task to know their customers, partners, suppliers’ partners and other third-party vendors so they can identify risk at the trade transaction level and avoid sanctions breaches deep in their supply chain. The well-publicized case of a cosmetics company that was fined nearly US $1 million for not vetting their supplier’s supplier, which turned out to be a sanctioned entity, highlights the risk of lax oversight.

In addition to monetary fines for supplier risk, organizations that do not toe the line on sanctions compliance may lose their license to transport high-risk goods (a highly lucrative revenue stream), become a sanctioned entity themselves, and face reputational fallout.

In today’s era of corporate social responsibility, knowing suppliers is not only necessary for compliance, but is also wise business practice. Provenance is important. Consumers want transparency and assurance that the workers in Vietnam or China sewing their polo shirts are treated and paid fairly. They expect companies to support fair trade and ethical labor practices whether that be for clothing, coffee beans, strawberries, or chocolate. That comes back to knowing all parties up and down the supply chain. Identifying third-party risk and ultimate beneficial owners is far more complex than name matching for sanctions. Yet, many companies are not even up to par with sanctions screening.

Between the more aggressive regulatory stance on supply chains and the business and reputation-related considerations of a breach, companies are quickly learning that doing ‘the bare minimum’ for sanctions screening is no longer acceptable. Missing crucial sanctions alerts of designated entities due to inflexible screening algorithms and poor sanction list data puts the company at risk.

However, the global nature of business is complicated. Companies must navigate an interwoven and often fragile ecosystem of suppliers, shippers, intermediaries, freight forwarders, brokers, merchants, financial institutions, and end customers. That means not only working with multiple parties across time zones in unfamiliar markets and different languages, but also ensuring regulatory compliance at every step, in spite of inconsistent approaches to data and information.

A well-oiled supply chain that includes effective screening for sanctions and dual-use goods enables companies to compete more effectively, manage operational costs and reach a broader audience while remaining compliant.

This white paper brings together the longstanding data, screening, and compliance expertise from LexisNexis® Risk Solutions. It explores the issues of customer data and its impact on matching, delves into the various screening challenges in the supply chain, and offers insight into how technology can help mitigate risk and improve compliance.
The world is drowning in data; more than 2.6 quintillion bytes per day, according to some estimates, and growing exponentially. Data drives decisions across industries, impacting everything from customer onboarding and regulatory compliance to procurement and inventory management. Good quality data leads to greater efficiency and reduced risk. Conversely, poor data quality is costly; not only in terms of potential revenue loss – which Gartner estimates can average $15 million per year1 – but also in fines for sanctions breaches and corresponding reputational damage.

1 quintillion = 1 followed by 18 zeros


Setting the foundation for more accurate screening

Poor data quality has a direct impact on the effectiveness and efficiency of transaction monitoring and screening efforts. It hinders an organization’s ability to identify potential risk in the supply chain. Overcoming the issues of poor data quality is critical for helping prevent money laundering, terrorist financing, and other illicit activities. For these reasons, data – or more importantly, good data – is a foundational pillar for effective screening.
The role of data

Good data quality describes data that is reliable and robust. It provides organizations with more dependable results when screening customers, suppliers, transactions and goods against sanctions, politically exposed persons (PEPs), adverse media, and other high-risk entities. Good data quality helps to minimize false positive alerts, which are time-consuming to review.

Unfortunately, several common hurdles make it difficult for organizations to gather and process the data needed for effective screening.

Lack of automation

Banks and corporates have not reached the level of automation in their compliance processes for global trade as they have in other business areas. They remain heavily dependent on manual input and paper-based documents.

For banks, the lack of automation increases the chance of human error, such as spelling mistakes, duplication and abbreviations of entity names, which may lead to even more vulnerabilities for exploitation and sanctions breaches. Lack of automation also makes for onerous, time-consuming review of transactions, bills of lading, letters of credit, and export documents to identify potential sanctions violations and illicit trade-related activities. Responsibility for verifying whether the prices and ports listed in a trade are accurate falls on the person reviewing the transactions and documentation.

For air carriers, transportation companies and other companies that rely on information provided by various parties along the supply chain, the lack of automation slows compliance checks. This is especially problematic given the large volume of airway bills and other documents that contain important details for various stages in the trade lifecycle and must be reviewed.
The role of data

Companies often have various departments and procurement teams around the world using different systems for achieving often different objectives, which may collect different data points at different times in the trade life cycle. In addition, each entity in the supply chain from freight forwarders to air cargo might handle data differently. Without coordination across all business areas and entities, it is difficult to aggregate and harmonize data, customers, transactions, trade files and other details for efficient review and compliance checks.

Although it is a key factor in screening effectiveness, data alone doesn’t tell the whole story. Screening technology and the matching algorithms upon which it is based have a significant impact on an organization’s ability to identify risk throughout the supply chain.
The challenges of name matching

While clean, quality data is the holy grail for screening, the reality is that data will never be perfect. Screening solutions must pick up the slack.

In other words, they need to be “intelligent” enough to adjust for extraneous text, missing details, truncation, single-name aliases, non-standard formats, transliteration, duplications and other common data issues that impact screening accuracy. This includes converting non-alphanumeric characters and abbreviations into alphanumeric-only characters that can be scanned effectively.
Solutions that rely on exact matching can exacerbate these data issues. Abbreviations or truncation in trade documents, such as using ONE rather than Ocean Network Express, could cause a sanctioned entity to be overlooked. Erroneously entering the customer name in the address line, which FinScan found accounts for more than 9% of customer errors with data records, could wreak havoc with results if the screening solution uses exact matching.

In addition to inadvertent errors, there is also the challenge of identifying names that are deliberately altered to mask true identity and elude matching algorithms. If a shipping company or operator name might raise a red flag because the country of ownership is on a sanctions list, a permutation of the operator’s name or a vessel name might be used to avoid suspicion.

Screening vessel names is particularly problematic with exact matching because complex ownership structures are not always reported accurately, making it easy to miss a high-risk entity. Unfortunately, deceptive shipping practices to evade sanctions and move illicit goods, including weapons of mass destruction are rising trends.

Cultural naming conventions, syntax issues and transliterations pose a host of additional challenges for organizations using exact matching. For example, it is common for Hispanic women to use two maiden surnames. Whether the paternal or maternal surname comes first depends on where they are from – e.g. Brazil or Spain. Exact matching in this case will generate fewer false positives but poses a greater risk of missing a true hit.

On the other hand, exact matching will deliver a huge number of hits in cultures where a large proportion of the population shares a small number of extremely common names. “Wang” (which means “King” in Mandarin), for example, is shared by nearly 76 million people, making it the most popular last name in the world. Using simple algorithms to screen for “Wang,” particularly in the absence of other data points, can easily overwhelm compliance teams with false positive alerts.

In essence, solutions that rely on exact matching and simple algorithms leave gaps in identifying risk, which can become a major abyss if data quality is not up to par.
Fuzzy matching uncovers hidden risk

Sophisticated screening solutions that include fuzzy matching can bridge the gaps mentioned earlier. By assessing the similarity of data to identify close matches rather than just exact matches, fuzzy matching exposes relationships and variations that might signal a potential true hit. It offers a broader, more holistic view of risk.

Fuzzy matching compensates for transliterations, non-standard formats and other data issues. It will recognize that Suleiman and Salayman for example, are transliterations from the same Arabic name, thereby identifying an entity that might otherwise be missed. However, fuzzy matching can also increase the number of false positives if the right screening solution is not used. Searching William E. Payne with fuzzy matching will also bring up Bill Payne, Willy Payne and other permutations.

Screening in near real time using intelligent algorithms and technology solutions that can be tuned to eliminate noise will identify true hits with greater accuracy, bringing greater efficiency and effectiveness to a company’s compliance operation.

Fuzzy matching exposes relationships and variations that might signal a potential true hit.
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A shifting regulatory landscape

In addition to the challenges posed by data quality and screening algorithms, an ever-changing regulatory landscape contributes to the compliance burden of managing supply chain risk in trade operations. To meet anti-money laundering (AML) obligations, companies must screen against sanctions, PEPs, law enforcement lists, regulatory lists, adverse media, internal lists and other lists of high-risk entities.

Regulatory oversight for AML compliance continues to increase as have the number of agencies involved in enforcement efforts for sanctions compliance. In addition to OFAC, HM Treasury, the UN, and a host of other regional and international agencies each publish their own list of sanctions. Not only do the lists not always align – sometimes they conflict.

Fines for sanctions breaches continue to escalate as well. Although financial institutions receive the largest fines, data from OFAC over the last three years shows that about 70 percent of OFAC enforcement decisions were against non-financial institutions. OFAC has expanded its focus to recognize supply chain risk as a growing threat. The 2019 cosmetics case is just one example.

In 2020, OFAC took major action across various worldwide supply chains – from warning of supply chain risk in Xinjiang to placing export controls on technology companies in Hong Kong and China – clearly demonstrating that it means business. In 2021, OFAC announced a settlement with Italy-based Nordgas, S.r.l., for re-exporting air pressure switches from a U.S. company to end-customers in Iran, concealing the customers from the U.S. company and violating the Iranian Transactions and Sanctions Regulations.

This heavier hand increases pressure on companies to pay closer attention to supply chain due diligence to mitigate the risk from third-parties. Knowing partners, agents, freight forwarders, shipping companies, vendors and other upstream and downstream links in the supply chain has never been more critical.

Yet, in spite of third-party risk and the threat of fines, a recent survey found that 75 percent of companies contacted did not maintain a single list of all their third-party relationships. In addition, more than 72 percent said they would not be able to quickly produce a report on all of their third-party relationships.

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3 https://home.treasury.gov/policy-issues/financial-sanctions/recent-actions/20210326
Preventing bribery and corruption

While banks and financial institutions are driven by AML compliance, which looks at the financial transactions between two companies, trade operations are driven by anti-bribery and corruption (ABC) regulations, whose focus is on the business relationship rather than the financial transaction.

The U.S. Foreign Corrupt Practices Act (FCPA), which was enacted to prevent bribery to public officials, was the first major anti-bribery law. It is the widest reaching but there are other similar national and local regulations across the world (e.g., U.K. Bribery Act).

To comply with the FCPA, companies carry out due diligence throughout the supply chain to ensure they are not working with foreign officials or an “instrumentality of state” – anyone employed on behalf of the government. However, what constitutes a public official and instrumentality of state varies considerably.

Although there is an overlap of risk and compliance with ABC regulations, ABC is primarily about mitigating risk whereas AML is related to compliance. Tackling ABC is the first step in preventing human trafficking and illegal wildlife trade since bribery and corruption of intermediaries and politicians are often the tools used to commit these and similar crimes.

In Russia, for example, a company must be 50% or more owned by state; other countries may set the bar lower. In other words, ABC regulations are open to interpretation and not as prescriptive as AML regulations for sanctions screening.

For example, a company might only be interested in SOEs greater than 50% serving the hospitality industry in France. On the other hand, they might want more granularity – perhaps a threshold of 5% – for oil and gas SOEs in the UAE, which might be deemed higher risk.

5 For more about specific risk relating to the Middle East, read our latest whitepaper: Financial Crime Compliance in MENA https://accuity.com/resources/financial-crime-compliance-in-mena/
Supply chain screening challenges

International trade operations are a well-documented and growing conduit for money laundering and arms and human trafficking.

The sheer number of players in the supply chain and historically paper-based nature of documentation make global trade operations more vulnerable to abuse by bad actors than other sectors.

For example, letters of credit issued by banks to finance exports may misrepresent the value of goods shipped, type of good, intended use, vessel, or port of call, paving the way to launder ill-gotten funds into the legitimate financial system.

The use of shell companies and complex financing agreements adds to a lack of transparency, contributing to the challenge of identifying risk. On top of that, organizations must manage numerous and ever-changing global, local, regional, and internal watchlists to ensure due diligence across the supply chain.

In addition, a lax approach to screening – relying on exact matching, simple algorithms and insufficient data for screening counterparties involved in shipments; not screening every shipment for designated parties; only looking at high-risk destination countries; using poor quality input data of company names; and similar issues – exposes organizations to unnecessary risk.

Needless to say, these issues pose unique challenges for trade compliance operations when it comes to sanctions screening, identifying dual-use goods and vessel tracking.
Supply chain screening challenges

Sanctions screening

If data is accurate, one would expect that sanctions screening is a straightforward process. After all, it is “simply” a matter of comparing customer names or third-party vendors against lists of sanctions, PEPs or reputationally exposed persons (REPs).

Unfortunately, sanctions screening is far more complex than it seems on the surface. Multiple regulators and changing lists mean screening vendors and suppliers periodically is not enough. When Chinese technology company Huawei was added to the list of sanctions for certain products, Delta Air Lines took three days to realize the addition, which impacted some of their airway bills for shipments. Delta had the urgent task to identify all affected shipments coming from Hong Kong that included Huawei as the shipper name and where the transit or destination country was indicated to be a U.S. airport or city.

Staying current is further complicated by the progressive build-up of sanctions programs over the years. In fact, the number of OFAC sanctions in the last four years was nearly as many as in the previous eight years. These issues have led to deeper regulatory scrutiny on sanctions screening frameworks as well as an increased focus on supply chain risk. It is not enough for organizations to ensure their direct suppliers, customers and jurisdictions in which they are doing business are not sanctioned; they must also ensure there are no sanctioned entities within the entire supply chain.

As the complexity of sanctions has increased from simple country-wide embargoes to more specific sectoral sanctions, so has the task of ensuring end-to-end sanctions compliance in the trade finance supply chain. Yet, companies that equate regulatory compliance with managing embargoes lose business by excluding whole countries from their business plan.

Managing sanctions risk involves thoughtful, concerted due diligence. It includes screening all data points in trade documentation, not just SWIFT messages, and careful screening for dual-use goods.

7 https://www.gibsondunn.com/2020-year-end-sanctions-and-export-controls-update/ (footnote the Accuity MENA white paper when it is available)
Supply chain screening challenges

Dual-use goods screening

A significant compliance challenge in the estimated US $61 billion trade finance industry involves identifying “dual-use goods.” This term describes items or technologies that may have legitimate civil purposes but could also be used for illicit military applications such as weapon making.

Dual-use goods cover a wide range of categories from raw materials and chemicals (e.g., chlorine) to GPS technology and machinery components such as ball bearings. These items are perfectly legitimate for civil use, making them difficult to spot, let alone confirm the intended purpose. However, identifying and understanding the intended purpose is critical – trafficking in dual-use goods “fuels the proliferation of weapons of mass destruction” and funds other illicit activities such as trade-based money laundering, terrorist financing and human slavery.

Organizations that fail to understand the end purpose of a dual-use good risk regulatory action, monetary fines, revocation of licenses, becoming a sanctioned entity themselves and other repercussions.

Providing services for dual-use goods is also extremely lucrative due to their high risk and restricted export controls. But given these risks, organizations need clear, consistent policies regarding roles and responsibilities around the collection and quality of data to ensure compliance with export controls and sanction requirements. This is easier said than done. The paper-based nature of global trade, generic language in shipping and commercial documents, highly technical descriptions and often incomplete information make it difficult to accurately discern the intended purpose of a particular good. Is a shipment labelled “spare parts” nothing more than automotive gaskets or are they rotary shaft seals for compressors that can have a more sinister use?

A lack of consistency further complicates identification – what is described in trade finance documents may not match the definition used by regulatory authorities to flag a dual-use good. Plus, there are the increasingly sophisticated malicious attempts by bad actors to disguise goods and transactions.

Determining the intended purpose of a dual-use good requires trained staff who understand the specific industry and can provide a thoughtful review of various data points: quantities, provider, destination, and other factors. For example, is ammonium nitrate, a legal fertilizer primarily used in agriculture going to a well-known farm operation in a low-risk jurisdiction? Or is it being shipped through a high-risk port to an unknown entity in a location not associated with farming where it could be used to make explosives?

Intelligent screening technology that can flag anomalies, identify inconsistencies and differentiate between goods intended for civil versus military use combined with internal training can help organizations thwart trading in illicit goods.

Vessel tracking

Approximately 90 percent of global trade involves maritime transportation. The number of touchpoints in the end-to-end shipping process and difficulty in collecting details on vessel sanctions, beneficial ownership, port of registry, operators and other critical data makes the shipment of goods one of the weakest links in the supply chain.

Recognizing the weakness in the maritime sector, OFAC issued a much-anticipated advisory on May 14, 2020 that addresses the risks and deceptive techniques used to evade sanctions. Although the guidance focuses on Iran, North Korea and Syria, it offers information and best practices appropriate for any high-risk jurisdiction and any participant in maritime operations: shipping companies, brokers, freight forwarders, insurance companies, flag registries, and financial institutions.

The OFAC guidance identifies several common practices used to mask activity, including:

- Manipulating the Automatic Identification System (AIS), an internationally mandated system that uses transceivers on board to track vessel details
- Altering the International Maritime Organization (IMO) number to hide a vessel’s identity
- Misrepresenting shipping documents to evade sanctions and disguise dual-use goods
- Engaging in ship-to-ship (STS) transfers to evade sanctions or shield the origin or destination of materials
- Establishing shell companies and complex webs of ownership, making it difficult to identify responsible parties and true beneficial owners.

To ensure there are no sanctions or other regulatory breaches within the shipping ecosystem, companies should carefully check the accuracy of all shipping documentation, verify the vessel’s IMO number, and flag vessels with a pattern of AIS disablement or manipulation. Conducting due diligence up and down the supply chain, including using fuzzy matching and complex algorithms for screening customers and counterparties along with continual monitoring of the entire transaction lifecycle are practical precautions to mitigate risk.
If a company has ambitious plans to grow, it will usually do so by exploring new geographies, expanding customer profiles or offering specialized products, which usually involves taking on higher risk. However, as a business grows in size, scope and transaction volume, it becomes increasingly difficult to identify potential risk.

As such, screening requires a wider set of watchlists to ensure all additional risks are addressed. However, screening entities and transactions against a wide range of watchlists can generate a flood of alerts that need effective management.

Due to the paper-based nature of global trade, investigating these alerts often means manually pouring over commercial invoices, bills of lading, letters of credit and other goods related documents to confirm critical details against various sources of regulations. This is not only time-consuming and costly, but the longer it takes to identify risk, the longer a company is exposed. Plus, manual processes do not scale well. Keeping up with ongoing regulatory changes is difficult to begin with and only becomes more complex as a business expands into riskier areas. And if the regulator eventually knocks on the company’s door, an audit trail of screening history is not easily available.

OFAC activity has been robust, reaching an all-time high of 248 designations against vessels in 2019 and more than 700 overall sanctions designations in 2020. Regulatory actions against companies for breaches deep in their supply chain have not gone unnoticed. Even companies that do not consider themselves to be global are realizing that they may inadvertently be exposed to sanctions risk due to a third-party customer or supplier. Rather than chance fines or a black mark on their reputation, organizations are taking a closer look at their entire trade finance supply chain to pre-emptively identify risk.
How an organization chooses to manage the risk, however, can have a direct impact on their bottom line. Companies that focus exclusively on embargoes for regulatory compliance may avoid the complexities of targeted and sectoral sanctions, but might leave potential business on the table as they exclude entire countries from their business plan. Likewise, any organization – whether a financial institution offering financing solutions or a company offering shipment services – that effectively manages export controls is better able to manage its business flow as it can reject a transaction at any critical stage of the transaction lifecycle, freeing time up for cases that are safe to proceed.

In many ways, managing risk is as much a regulatory requirement as it is a business decision. Implementing the right screening technology can bring more assured compliance, greater efficiency, better customer service and new opportunities.

For example, during the COVID-19 pandemic some regulators made exceptions for certain goods, such as medical equipment and PPE, to be shipped to sanctioned countries. As a result, air carriers with shipments that contained medical equipment for the pandemic could fly to Iran – and were able to generate additional business over the last year from thousands of extra tons of cargo.
The role of technology

The ability to process data quickly and accurately is critical for keeping trade finance operations running smoothly and securely.

Scanning technology that relies on fuzzy matching and intelligent algorithms will be more effective at recognizing variations that might be overlooked with exact matching – truncated company names, extraneous text, non-standard formats and other issues – and immediately flag them for attention.

Technology also delivers efficiency gains. Functionality such as one-click merging of duplicates into a single record avoids having compliance teams rescreen the same record over and over again. Automated screening speeds workflow and enables companies to ship with confidence knowing the goods being handled, the end destination, and the individual or company receiving the goods have passed sanctions checks.

When selecting technology, organizations should look for solutions that:

- Use intelligent matching techniques and complex algorithms for screening
- Conduct sanctions checks against customers and third parties, including brokers, freight forwarders, consignees, shippers, airports, goods, countries, routes and more
- Classify goods against lists of dual-use-goods and obtain required licenses in a timely fashion
- Enhance sanctions checks with fully customisable lists, including the ability to add internal company-specific lists of blocked entities or goods
- Facilitate regulatory review and demonstrate compliance with a clear audit trail across the different stages of the trade finance transaction chain
- Offer up-to-date watchlist data, critical vessel information, beneficial ownership, IMO numbers, operators, port of registry and other details not covered by OFAC.
We offer a robust solution that includes software and industry-leading watch list data to support all stages of the trade finance lifecycle. Our Firco™ Trade Compliance solution automatically screens customers, dual-use goods, locations and transportation vessels against sanctions, PEPs and other lists.

To proactively check for sanctions on vessels and ports of call, Firco Trade Compliance Ship Enforcement Alerts (SEA) notifies organisations as soon as a ship enters a port, and also tracks “dark” activity to identify where and when a ship turns its AIS tracking on and off.

Contact us to learn how our solutions for trade finance can help you manage supply chain risk. risk.lesnxis.com/trade
About LexisNexis Risk Solutions

LexisNexis® Risk Solutions harnesses the power of data and advanced analytics to provide insights that help businesses and governmental entities reduce risk and improve decisions to benefit people around the globe. We provide data and technology solutions for a wide range of industries including insurance, financial services, healthcare and government. Headquartered in metro Atlanta, Georgia, we have offices throughout the world and are part of RELX (LSE: REL/NYSE: RELX), a global provider of information-based analytics and decision tools for professional and business customers. For more information, please visit www.risk.lexisnexis.com and www.relx.com.

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