2024 Data Quality Report

DOW JONES
RISK &
COMPLIANCE

Letter From Joel Lange

Welcome to the 2024 Dow Jones Risk & Compliance Data Quality Report, sharing information and statistics about our performance over the previous year. We value the feedback and investment our clients make in our solutions and know that clear communication about our data quality is critical to building and maintaining a trusted relationship.

Dow Jones has a rich tradition stretching back to 1882 of serving customers who demand the best data to make critical business decisions. Our Risk & Compliance team supports our clients in their mission to better understand, mitigate and avoid regulatory, commercial and reputational risk. More specifically we are focused on providing data solutions in the areas of Financial Crime Compliance, Third-Party Risk Management, Sanctions Compliance and Trade Compliance.

Data quality sits at the heart of Dow Jones Risk & Compliance and continues to be of utmost importance to us and to our clients. As we have done for more than 20 years, we are continually building out from the core of our premium, highly structured content supported by and extended with Dow Jones Factiva, an unparalleled source of global media. Dow Jones will continue to support our clients with their risk-management programs, building on our unique access to global media and multilingual and experienced analysts to provide the highest quality data to financial institutions and global corporations. We aim to supply the most accurate, timely and relevant information that allows our customers to make risk decisions quickly and with confidence.

Compliance-related services must be both high-quality and reliable, and this has never been more true as the world grapples with economic uncertainty and rising geopolitical tensions. We have continued to maintain our high standards against the backdrop of evolving restrictions and regulations and ever-increasing volumes of sanctions-related changes.

This year's report highlights the continued focus on ensuring accurate, complete and timely data over the past year.

- **Sanctions related to Russia's invasion of Ukraine:** Sanctions regulations and detecting sanctions evasion remain central to the concerns of compliance professionals as Russia's invasion of Ukraine in February 2022 has put sanctions in the spotlight to a degree not witnessed previously. Sanctions designed to cripple the Russian economy continue with the deployment of old tactics, such as asset freezes imposed on individuals and
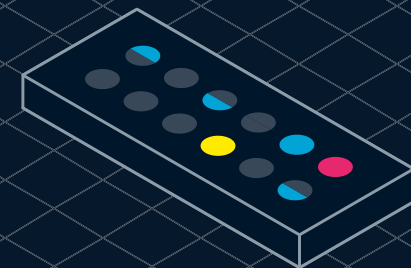
entities, and newer tactics (the exclusion of banks from SWIFT, the price cap on Russian oil prices). The designation of individuals and entities by the European Union, U.S. Office of Foreign Assets Control (OFAC) and the United Kingdom by monthly volume peaked in March 2022 but designations continue at unusually high levels with no signs that sanctions activity will fall back to pre-February 2022 levels. Sanctions lists data and information about how we process this content has always been critically important to our clients, but the current climate means sanctions compliance, and by extension regulatory risk compliance in general, has become increasingly visible at board level at global banks and corporations. The timely, accurate and relevant sanctions data provided by Dow Jones helps clients to avoid risk in processing transactions and onboarding and monitoring customers and partners. We demonstrate our commitment to the provision of quality sanctions data by undertaking each year a review of the Dow Jones Sanctions Platform and Data Set to the ISAE 3000 Reasonable Assurance standards.

- **Beyond direct sanctions:** In recent years we have witnessed a real shift in sanctions compliance moving beyond those directly sanctioned to those owned or controlled by sanctioned subjects. As a result we continue to extend the scope of our Sanctions Control & Ownership (SCO) content set, launched in 2015 in response to Russia's invasion of Crimea, to support clients in meeting their evolving sanctions requirements. Since January 2023 we have included subsidiaries regardless of their level in the ownership tree of subjects sanctioned by the U.S. Office of Foreign Assets Control (OFAC), the European Union and/or HM Treasury in the United Kingdom. Our latest enhancement reflects that regulators around the world are making it increasingly apparent that while those entities owned or controlled by sanctioned subjects are not named in their sanctions designations they are similarly subject to financial sanctions, creating a particularly acute compliance challenge. From July 2024 we have been expanding our SCO coverage to

sanctions content from the following jurisdictions: Australia, Canada, France, Japan, New Zealand, Singapore and the United Nations.

This modification to the scope of coverage together with the overall increase in sanctioned subjects has resulted in an increase in the SCO content set from just over 30,000 in July 2022 to just over 39,000 in July 2023 and over 48,000 in July 2024.

Supply chain risk content: New laws and emerging regulations have emphasized the need for companies to identify Environmental, Social and Governance risks across their value chain. The German Supply Chain Act, for example, has increased demand for data on environmental and labor issues. Our Adverse Media Entities (AME) data has continued to grow to meet this demand. We now have over 23,400 AME profiles relating to human rights, discrimination and workforce rights issues including child labor and forced labor, and over 13,000 AME profiles relating to adverse environmental concerns.

- **Additional lists:** Content coming under the Sanctions and Other Official Lists data sets continues to grow with the addition of more than 170 sanctions lists and other official lists in the year to end July 2024, arising out of new regulations or added as a result of client requests. In total there are now over 1,900 current lists.

- **Expanded Trade Compliance data:** As part of the action to limit Russia's ability to wage war against Ukraine, governments have introduced additional trade measures to restrict Russia's access to items critical to the development and production of weapons. Following the identification of goods and technology supporting Russian military systems, many of them found on the battlefield in Ukraine, the United States, the European Union, and the United Kingdom, have published export control lists of "Common High Priority" items including electronic and mechanical components that must not reach Russia or Belarus. Items from these Common High Priority lists
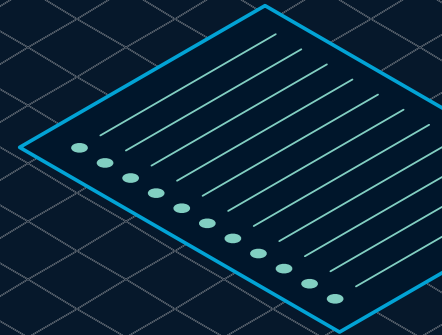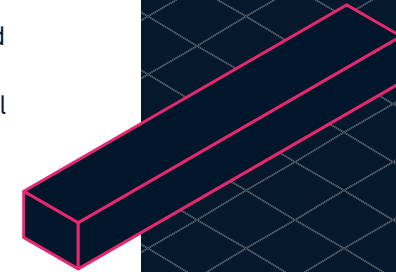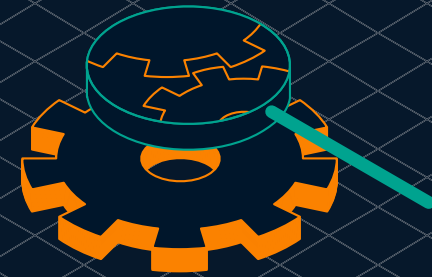
along with their Harmonized System (HS) codes have been added to the Dow Jones Dual-Use Goods (DUG) feed to support businesses (exporters, re-exporters and service providers including financial institutions and logistics companies) required under the export rules to conduct due diligence to ensure that the end destination of these products is not Russia or Belarus.

Additionally, the US Treasury determined a list of items pursuant to section 11 (a)(ii) of Executive Order 14024. A foreign financial institution that conducts or facilitates any significant transactions with Russia's military-industrial base involving such an item may risk being sanctioned by OFAC. As a result, these items have been added to the Dow Jones DUG feed. We expect the precision of regulatory guidance in this area to continue with new agencies like the Office of Trade Sanctions Implementation that will be responsible for the civil enforcement of trade sanctions.

- **VASPs/Crypto:** As the Financial Action Task Force (FATF) extended its global standards on anti money laundering and counter-terrorist financing (AML/CFT) to apply to virtual assets (VAs) and virtual asset service providers (VASPs) there has been increased interest in being able to readily identify VASPs for risk assessment purposes. To support our clients we have compiled and launched a list of registered VASPs from around the world, available as a separate feed to support screening requirements.

- **Financial instruments:** In conjunction with our partner BIGTXN, we have launched a Financial Instruments Feed. This allows customers involved in pre-trade and post-trade activities to identify listed securities that are linked to sanctioned entities and to entities majority owned or controlled by sanctioned subjects. The feed consolidates and enriches ISINs, CUSIPs, SEDOLs, and FIGIs into a structured file that integrates seamlessly into customer trading and portfolio management systems. Each instrument links to the corresponding entity profile number in Dow Jones RiskCenter Financial Crime to streamline match review and further investigation.

Thought leadership is another facet of the Dow Jones offering. We continue to offer a variety of resources to help our clients navigate the compliance waters. Some examples:

- Sanctions Insight, a weekly newsletter that provides an overview and analysis of regulatory actions from key regulators and jurisdictions.

- Risk & Compliance resources covering a variety of compliance topics.

- Webinars and reports to help inform our community — follow us on Linkedin for information and updates.

In addition to our content and thought leadership offerings, we are proud of our many product enhancements. Please see page 25 for details on this and other products.

The importance of trusted sources when making compliance decisions has never been greater. We give you our commitment that we will continue to provide the very best data to cover the risks that concern you the most.

Joel Lange

EVP and General Manager,
Dow Jones Risk & Research
30 October 2024

Quality Focus and Continuous Improvement

Dow Jones Risk & Compliance content contains risk data to help our clients understand, mitigate and avoid regulatory, commercial and reputational risk. Data quality is of utmost importance to this mission.

This report describes how Dow Jones creates, structures and monitors Risk & Compliance content in order to provide accurate, timely and complete data — continuously improved and delivered when and where our clients require it.

Elements of the Dow Jones model:

- The support of a global, trusted news-gathering organization providing unrivaled, high-quality journalism, data and analysis, emphasizing quality, innovation and customer service

- A clear definition of coverage

- A large Dow Jones team of skilled, experienced multilingual researchers, quality analysts and data scientists

- Reputable sources from around the world, including local-language sources

- Structured information to surface relevant data and minimize false positives

- Data monitoring for accuracy, validity, timeliness and completeness

- Quick response to customer feedback

- Content and coverage reviews that harness automation so we can continuously improve — and be nimble in meeting the needs of our clients

Data Coverage

One of the challenges organizations have when setting up and reviewing vendors for their anti-money laundering, anti-corruption and bribery and sanctions compliance programs is the difficulty in accurately comparing offerings from data providers.

The criteria that providers use for including individuals and entities in lists vary widely, as does the depth and structure of coverage. Expanding the criteria naturally allows providers to build larger lists, which on the surface provides broader risk coverage. However, there is a serious downside to doing this: screening names against larger, less-defined lists increases the likelihood of false positives and the time required to clear names. Such inefficiencies in the screening process cause operational delays without mitigating additional risk.
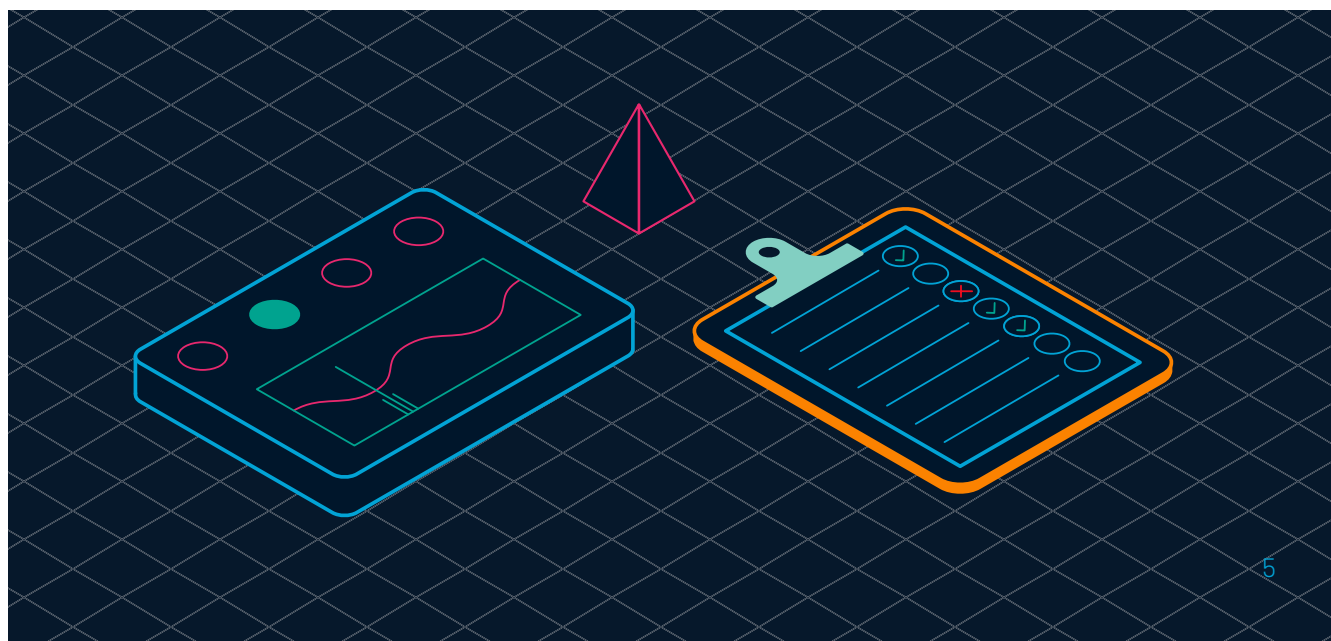
False Positive Reduction: Clearly Relevant

Dow Jones uses a two-pronged data strategy to reduce the number of false positives in screening.

Definition: In a climate of increasing data privacy legislation, carefully selecting the definitions for the individuals and entities going into our database is critical. The margin for error is reduced from day one and the integrity of content within Risk & Compliance is of paramount importance. The integrity of our definitions means that customers can rely on:

- receiving the data relevant to covered risks
- keeping false positives to a minimum

Secondary Identifiers: Dow Jones researchers strive to add secondary identifiers to primary source data so that customers can know with reasonable certainty whether or not the party in their data is the same as that in the Risk & Compliance data. These include, but are not limited to, dates and places of birth, gender, original script names, addresses and company identification

numbers. Secondary identifiers often are lacking from the original data and are found only by conducting thorough research on relevant publicly available material.

In addition, Dow Jones continually conducts quality assurance using a range of monitoring methods. This leads to long-term quality improvements in areas such as secondary identifiers despite the dependence on publicly available information. The percentage of Risk & Compliance profiles with two or more secondary identifiers continues around 67% compared with 34% in 2008 and 63% in October 2017. The secondary identifiers included in these calculations are gender, original script name, identity number, image URL, place of birth, date of birth and address.
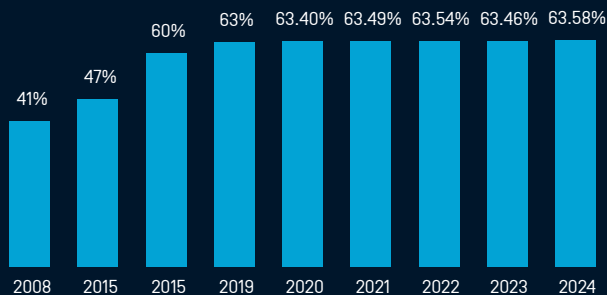
Since 2008, the number of profiles has increased from 530,000 to 4.23m in July 2024, up from 3.99 million in July 2023. Dow Jones continues to emphasize the focus on quality even as content has expanded owing to

organic growth and the addition of new data sets in response to customer feedback.

The charts to the right show that over the course of the last five years the ratio of PEP* profiles with a date of birth is being maintained despite the high number of PEP profiles created each year and the challenges relating to finding publicly available date of birth data. The current ratio remains stable at 63.5% despite the 4.1% increase in the volume of PEP in the past year and a 5.5% increase the previous year. The ratio compares with 47% ten years ago and 60% five years ago.

Risk & Compliance sources all information, including dates of birth, from publicly available information in different languages. This presents a challenge in that for individuals with lower-profile PEP roles and for certain countries there is little identifying information in the public domain. We are proud of the progress we have made in recent years in expanding our volume of identifiers.

% OF PEP WITH DATE OF BIRTH

2008	2015	2015	2019	2020	2021	2022	2023	2024
41%	47%	60%	63%	63.40%	63.49%	63.54%	63.46%	63.58%

PEP PROFILES GROWTH

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
436,746	471,830	500,590	534,345	571,099	604,277	630,096	660,143	696,373	724,941

*PEP excluding those categorized as Additional Domestic Screening Requirement profiles, or ADSR, i.e. those classified as PEP by a country's national regulations only

Dow Jones Coverage of Risk Categories

Each risk category has been carefully defined to ensure the data meets client requirements.

RISK CATEGORY	DESCRIPTION	COVERS PEOPLE	COVERS ENTITIES
WATCHLIST			
Politically Exposed Persons (PEP)	22 Occupation Categories covering not only national and regional levels but also international organization officials, enabling users to screen for domestic, foreign and international PEP.	YES	
Subjects on Sanction Lists	Almost 80 sanctioning bodies*	YES	YES
Subjects on Other Official Lists	More than 470 other official lists*	YES	YES
Subjects on Other Exclusion Lists	More than 90 lists*	YES	YES
Sanctions Control & Ownership	Companies owned or controlled by people, entities, countries or regions sanctioned by the U.S. Office of Foreign Assets Control (OFAC), the European Union, the United Kingdom, Australia, Canada, France, Japan, New Zealand, Singapore and the United Nations. Minimum ownership stake of 10% A sanctioned individual has a possible controlling interest (either as a member of the board or as a senior executive)		YES
Enhanced Country Risk	In addition to the vessels that appear on sanction or other official lists, vessels that are not sanctioned but are linked to one of the following sanctioned countries are included: Cuba, Iran, North Korea and Syria.		YES
People with Adverse Media/Negative News (Special Interest Persons — SIP)	People who are reported (in licensed sources on Factiva) to have been formally accused, arrested or convicted of: – Corruption – Financial crime – Organized crime – Tax crime – Trafficking – Terror (Categories covered have been expanded to include Child Sexual Exploitation)	YES	
Relatives of PEP	31 categories of family members	YES	
Close Associates of PEP	11 categories of close associates	YES	

*As of July 2024.

An up-to-date list of our Sanctions Lists, Other Official Lists and Other Exclusions Lists coverage is available here. (Please login to RiskCenter to view.)

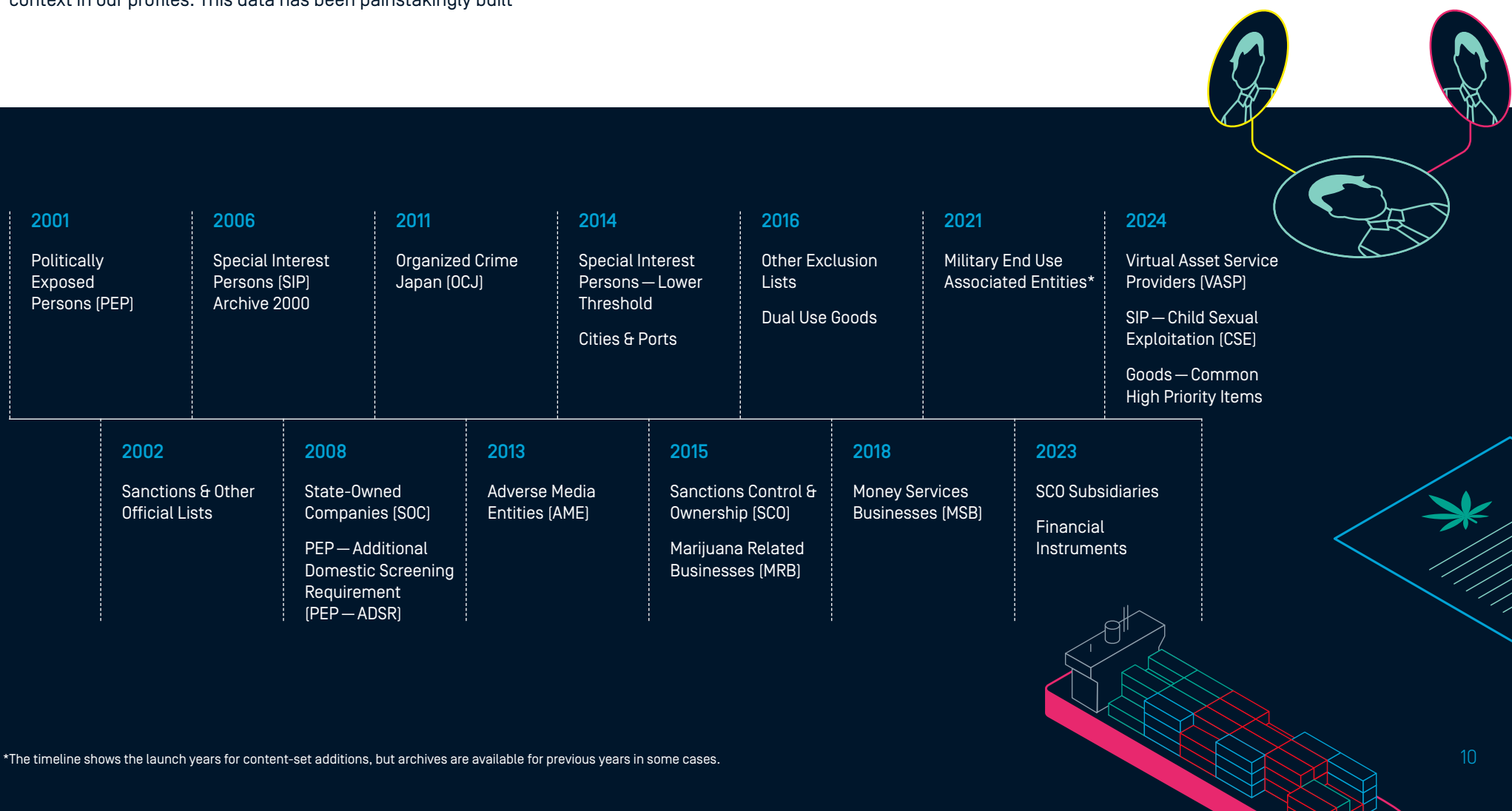| RISK CATEGORY	DESCRIPTION	COVERS PEOPLE	COVERS ENTITIES
STATE-OWNED COMPANIES (SOC)			
Government Owned or Controlled Corporations	Corporations owned by federal, regional or municipal governments in every country.		YES
ADVERSE MEDIA ENTITIES (AME)			
Entities with Adverse Media or Negative News	Profiles of entities with a corporate structure and commercial purpose that have had adverse/negative media coverage (in licensed sources on Factiva) falling into one or more of 17 categories in four broad areas: – Regulatory; – Competitive/Financial; – Environmental/Production; – Social/Labour		YES
LOCATIONS			
Cities & Ports (Locations) in sanctioned countries	Structured data for regions, sub-regions, cities, seaports, airports and free trade zones in certain sanctioned countries and regions. Coverage includes variations of the place names in English, Chinese, French, German, Spanish, Japanese and the official language of the country to assist with the detection of risk associated with locations in sanctioned countries and regions.		YES
SPECIALIST LISTS			
Marijuana-Related Businesses	Licensed marijuana companies in the United States and Canada. For the states or provinces (and Washington, D.C. and Guam) where there is some form of marijuana legalization and an official, publicly available list of licensees, Dow Jones covers names on those lists.	YES	YES
Money Services Businesses	Licensed providers of money transfer services, including currency exchange, check cashing and issuing, cashing or selling money orders in Canada, Hong Kong, Malaysia, Philippines, Singapore, and the United States.	YES	YES
Virtual Asset Service Providers	Launched in March 2024. Virtual Asset Service Providers licensed to provide their services.	YES	YES
TRADE COMPLIANCE			
Dual-Use Goods	A dataset comprising match phrases and goods codes used to describe dual-use goods and controlled items with related information for use in trade compliance screening and related systems.		YES
Military End Use Associated Entities	Content identifying corporate entities that are 10% or more owned or controlled by those listed by OFAC as Non-SDN Chinese Military-Industrial Complex Companies or those identified by the U.S. Bureau of Industry and Security as Military End Users.		YES

RISK CATEGORY	DESCRIPTION	COVERS PEOPLE	COVERS ENTITIES
ADDITIONAL RISK DATA**			
Beneficial Ownership	Dow Jones Beneficial Ownership is sourced through Dun & Bradstreet and contains beneficial owners for over 300 million entities globally. Ownership details can include Type of owner (Entity/Individual), Name of owner (either the natural person or entity name), Country of owner, Whether owner is beneficiary or not, Ownership percentage, Degree of separation and more. This data is available at an additional cost.	YES	YES
Financial Instruments	In conjunction with our partner BIGTXN, we offer a Financial Instruments Feed. This allows customers involved in pre-trade and post-trade activities to identify listed securities that are linked to sanctioned entities and to entities majority owned or controlled by sanctioned subjects. The feed consolidates and enriches ISINs, CUSIPs, SEDOLs, and FIGIs into a structured file that integrates seamlessly into customer trading and portfolio management systems. Each instrument links to the corresponding Dow Jones profile number, to streamline match review and further investigation. This Financial Instruments Feed is available at additional cost.		YES
Vessel Tracking	The Advanced Vessel Tracking module with data sourced from Pole Star's PurpleTRAC provides additional vessel details (beyond simply whether the vessel is sanctioned) such as recent voyage history, current location and destination, registered owner, operator, group beneficial owner, etc. and the ability to actually track its progress. This data is available at an additional cost.		YES

**These additional data sets are not in the scope of the data quality work detailed below.

Content Set Growth*

Dow Jones has continually added content sets in response to the evolving compliance landscape and provides a deep archive to serve our customers. Our content sets contain both current and historical information that provides a rich conte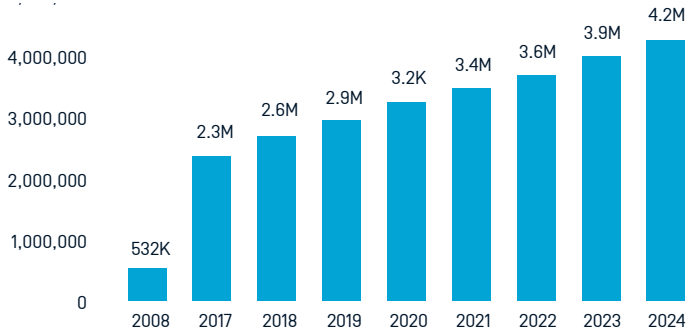xt in our profiles. This data has been painstakingly built through years of dedicated research. The PEP content set has an archive extending to 2001, Special Interest Persons from 2000, State-Owned Companies has coverage from 2008, and Adverse Media Entities from 2012.
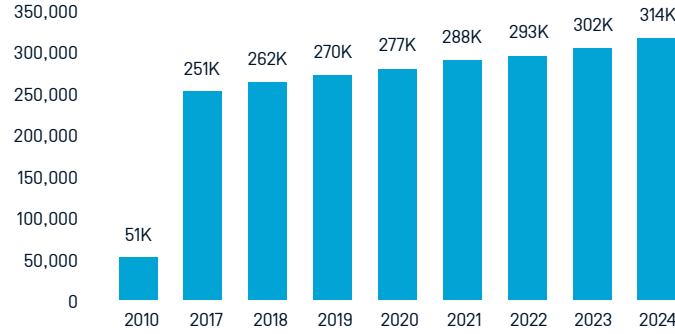
2001
Politically Exposed Persons (PEP)

2006
Special Interest Persons (SIP) Archive 2000

2011
Organized Crime Japan (OCJ)

2014
Special Interest Persons — Lower Threshold

Cities & Ports

2016
Other Exclusion Lists

Dual Use Goods

2021
Military End Use Associated Entities*

2024
Virtual Asset Service Providers (VASP)

SIP — Child Sexual Exploitation (CSE)

Goods — Common High Priority Items

2002
Sanctions & Other Official Lists

2008
State-Owned Companies (SOC)

PEP — Additional Domestic Screening Requirement (PEP — ADSR)

2013
Adverse Media Entities (AME)

2015
Sanctions Control & Ownership (SCO)

Marijuana Related Businesses (MRB)

2018
Money Services Businesses (MSB)

2023
SCO Subsidiaries

Financial Instruments

*The timeline shows the launch years for content-set additions, but archives are available for previous years in some cases.

10

As risk-category coverage has grown, the number of profiles available in Risk & Compliance has increased. The following charts show overall growth, as well as growth in several data sets:
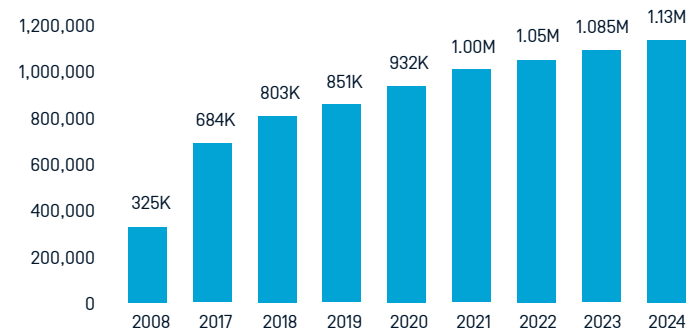
OVERALL RISK & COMPLIANCE GROWTH:

Bar chart (values by year):
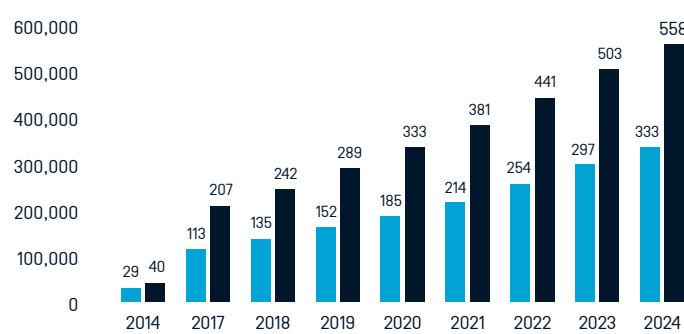- 2008: 532K
- 2017: 2.3M
- 2018: 2.6M
- 2019: 2.9M
- 2020: 3.2K
- 2021: 3.4M
- 2022: 3.6M
- 2023: 3.9M
- 2024: 4.2M

Y-axis: 0; 1,000,000; 2,000,000; 3,000,000; 4,000,000

STATE-OWNED COMPANIES (SOC):

Bar chart (values by year):
- 2010: 51K
- 2017: 251K
- 2018: 262K
- 2019: 270K
- 2020: 277K
- 2021: 288K
- 2022: 293K
- 2023: 302K
- 2024: 314K

Y-axis: 0; 50,000; 100,000; 150,000; 200,000; 250,000; 300,000; 350,000

POLITICALLY EXPOSED PERSONS (PEP):

Bar chart (values by year):
- 2008: 325K
- 2017: 684K
- 2018: 803K
- 2019: 851K
- 2020: 932K
- 2021: 1.00M
- 2022: 1.05M
- 2023: 1.085M
- 2024: 1.13M

Y-axis: 0; 200,000; 400,000; 600,000; 800,000; 1,000,000; 1,200,000

ADVERSE MEDIA ENTITIES (AME):
In thousands

Legend: ■ Profiles ■ Issues

Bar chart (Profiles / Issues by year):
- 2014: 29 / 40
- 2017: 113 / 207
- 2018: 135 / 242
- 2019: 152 / 289
- 2020: 185 / 333
- 2021: 214 / 381
- 2022: 254 / 441
- 2023: 297 / 503
- 2024: 333 / 558

Y-axis: 0; 100,000; 200,000; 300,000; 400,000; 500,000; 600,000

SPECIAL INTEREST PERSONS (SIP):

Bar chart (values by year):
- 2008: 15.9K
- 2017: 434K
- 2018: 511K
- 2019: 596K
- 2020: 667K
- 2021: 723K
- 2022: 770K
- 2023: 833K
- 2024: 893K

Y-axis: 0; 200,000; 400,000; 600,000; 800,000; 1,000,000

SANCTIONS CONTROL & OWNERSHIP (SCO):

Bar chart (values by year):
- 2017: 11K
- 2018: 18K
- 2019: 20K
- 2020: 22K
- 2021: 24K
- 2022: 30K
- 2023: 39K
- 2024: 48K

Y-axis: 0; 10,000; 20,000; 30,000; 40,000; 50,000

A Note About PEP and National Lists

More than 20 years of experience in providing data on Politically Exposed Persons (PEP) has confirmed the dynamic nature of the universe of PEP and the evolution of PEP regulations and guidance. Regulatory guidance focuses on taking appropriate and proportionate measures to identify PEP, their family members and close associates, and assess the level of risk associated with their role, their jurisdiction, their time in office.

Dow Jones is often asked about lists of Politically Exposed Persons published by governments. Countries can publish two types of PEP lists: a list of politically exposed positions or a list of the names of individuals holding PEP roles. These lists, together with other international and national regulations, have over the years been considered when drawing up the Dow Jones PEP definition and our provision of PEP data.

The EU's Fifth Money Laundering Directive required EU member states to issue and keep up to date a list of their domestic prominent public functions. In last year's report we highlighted that only 22 EU member states had at that time provided a list of such functions and only two of those, Denmark and Latvia, had compiled lists of individuals holding PEP functions. In November 2023 there was renewed interest in domestic PEP lists from EU Member States as the EU Official Journal published the long-awaited combined, centralized list of "Prominent public functions at national level, at the level of International Organizations and at the level of the European Union Institutions and Bodies". The publication of the list of functions resulted in exhaustive

analysis and comparison against the AML legislation, PEP guidance and the definition currently in effect in the individual countries of the European Union. The EU-published list of prominent national public functions was, largely, a sum of the lists of politically exposed functions that had been previously published by the majority of the individual EU states, but there were some interesting cases of countries making available new information or providing further details and specifications on existing core PEP definitions, as such altering these definitions. In addition, for most of the EU member states, roles within international organizations were published for the first time illustrating an interesting lack of uniformity in approach to international organization roles. The combined list has resulted in some modifications to our coverage but the majority of roles had previously been covered. Of course it is one thing to publish a list of functions and another to research, identify and include those individuals holding those functions and our specialist knowledge and experience of compiling PEP data should reassure our clients that we are in a position to provide the data they require.

As the Financial Action Task Force (FATF) 2013 recommendations mention, government provided lists of PEP have potential shortcomings as they may not be complete (lacking names, identifiers, relatives), and are quickly outdated. Our experience confirms these observations and thus we do not rely on them solely. Furthermore, while countries may compile lists they may place restrictions around the ability to access or use the databases.
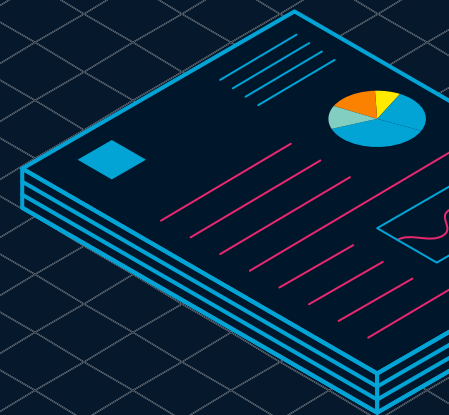
Very few countries have published a list of names of domestic PEPs. One example is Brazil, where in September 2019 the government published a list containing the names of approximately 70,000 domestic PEPs. The list has since been updated many times and now is regularly updated once a month. Since its launch the number of names on this list has almost doubled, due to municipal elections, and now contains more than 130,000 names.

As mentioned above, Denmark is another country that publishes a list of individuals holding PEP roles and has been doing so since December 2017. The list is usually updated a few times a month, and the Danish Regulator began publishing two additional lists for Faroe Islands and Greenland in April 2022 and May 2023, respectively. Uruguay also regularly publishes updates to a substantial list of 6,000 individuals holding PEP roles.

Our research team closely monitors the changes in these lists, among others, and ensures that all the individuals included in their current and past versions have a PEP profile in Risk & Compliance. Given our knowledge of PEP data and our experience managing large lists, we can identify anomalies in the data provided and liaise with the providers of the information, similar to our approach with those issuing sanctions, other official and other exclusion lists, to verify if the information is correct.

The coverage of PEP by Dow Jones has evolved to take account of national regulations providing a definition that goes beyond our global Dow Jones PEP definition that we apply to all countries. In order to include within Risk & Compliance those PEPs covered by a country's national regulations, we have a category "Additional Domestic Screening Requirement" (ADSR) that is applied to those holding positions that would be outside the scope of our standard coverage. For example a country may cover lower level civil servants, heads of hospitals, municipal councilors, heads of universities or regional judges. We apply the ADSR category to PEP for 52 jurisdictions including France, Poland, Brazil, Russia, Italy, Canada, Malaysia, Ukraine and Indonesia.
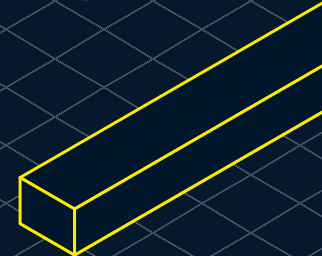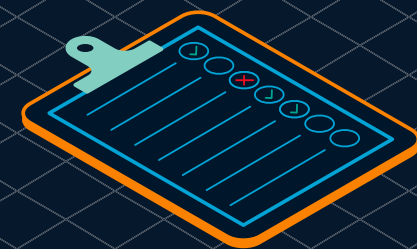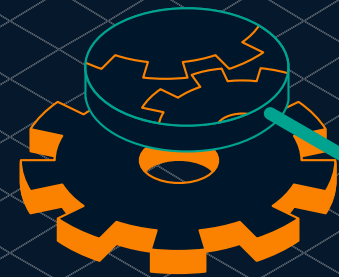
Research Team and Sources

Dow Jones Risk & Compliance employs a global team of researchers. Our team includes several hundred researchers and analysts based in Dow Jones offices in the Americas, Europe and Asia, who specialize in coverage of particular areas, including sanctions, politically exposed people, adverse media and company ownership structures. We see the in-house research team as one of our key assets.

Research excellence impacts data quality in two ways:

- Subject matter expertise (whether related to countries, sanction lists, political or corporate structures) allows researchers to identify, authenticate and consolidate disparate pieces of information about the same individual or entity in order to ascertain what is relevant.

- Broad expertise in languages provides access to information sourced locally in the original language, which is more likely to be accurate, complete and up-to-date. Collectively the Dow Jones research team is fluent in approximately 60 languages including those languages valued most by our clients: Chinese, Russian and Farsi.

- One key advantage Dow Jones researchers have is the ability, particularly for the Special Interest Persons (SIP) and Adverse Media Entities (AME) profiles, to leverage Factiva, the Dow Jones archive of 33,000 sources in 32 languages More than 600,000 articles are added to Factiva daily, many of which are otherwise accessible only via paid subscription. In some cases, the archive of the source goes back more than 40 years.

Information contained in Factiva articles is used to create and enrich Risk & Compliance profiles, particularly the adverse media profiles of both people and entities. Sources also include government and other official websites. As detailed above, the research team also maintains data for over 1,900 List References (Sanctions Lists, Other Official Lists, Other Exclusion Lists) sourced from over 450 list-issuing bodies (i.e. sanctions, official regulators, financial intelligence units, law enforcement bodies, supervisory authorities etc) using a thorough data collection, management and transfer methodology.

For all our content sets, we cast a wide net to find the data that our clients need, whatever the language, and also focus on the most relevant data to save our clients time.

Risk & Compliance is continuously innovating with the use of automation to augment the research team's data discovery, content creation and quality assurance efforts. Dow Jones considers artificial intelligence (AI) and machine learning (ML) fundamental priorities, critical to the company's growth. One area of investment involves developing and refining large scale data analysis techniques for Risk & Compliance to identify and retrieve relevant information for coverage. Our research team is well positioned to work with Dow Jones data scientists and specialists to refine the AI tools at their disposal to focus on compliance data.

For example, we use AI tools to augment the abilities of our researchers by examining hundreds of thousands of multilingual articles processed in any day, eliminating articles that are irrelevant and capturing and structuring the data needed to associate and classify the event, person and/or entity. This allows our researchers to focus on ensuring the most accurate, timely and complete data possible is being passed to our customers.

In addition, the expertise of our in-house team enables us to maintain rigorously defined coverage parameters, so our clients receive consistent, valid information for each of our coverage areas.

The combination of automated solutions with human expertise — Dow Jones "Authentic Intelligence" — is interwoven throughout our data quality process.

Quality Assurance: Four Factors, Three Layers and Review

The Dow Jones Risk & Compliance Data Quality Assurance program covers four factors: accuracy, completeness, validity and timeliness. Dow Jones aims to ensure consistent quality across all of our content sets.

To measure the four factors, the Risk & Compliance teams use a three-layered approach as well as an overall assessment of the quality program.

The three layers of quality assurance are made up of controls carried out by the research team, those carried out by the Quality Assurance team as part of a profile quality monitoring program and quality checks carried out across the entire database by a third team that looks at the integrity of Risk & Compliance data overall.

The research team's checks cover data at the input stage and post processing to minimize the risk of errors or a mismatch in coverage, categorization or linking to other profiles.

The Quality Assurance team conducts regular internal audits of data for each category. Scoring methods include industry standard precision and recall. This is applied to the audited data and the results are fed back on an individual and team basis as part of a quality cycle.

The Data Integrity team assesses quality via hundreds of automatic quality checks performed on a regular basis covering all content sets included in Risk & Compliance.

Lastly, the Quality Assurance program itself is the subject of review to ensure continuous improvement. As part of our reviews, we have expanded and enhanced various automated components of our QA program. The combination of automation and research team expertise has boosted the effectiveness of our quality checks and Risk Database quality overall.
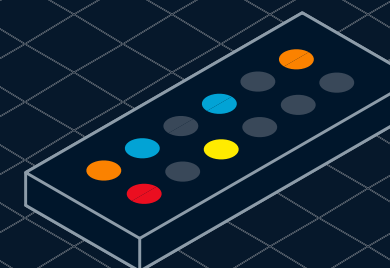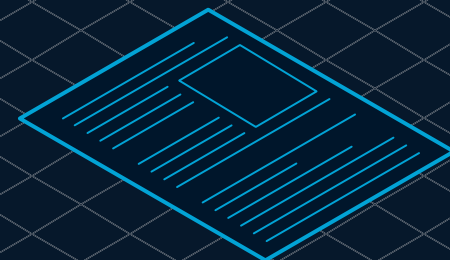
Monitoring for Accuracy

The Quality Assurance team samples a portion of new and changed profiles to maintain high levels of data precision. Each sampled profile is checked against publicly available information and given two scores: a Precision score denoting the accuracy of the content within a profile, and a Recall score denoting the completeness of the data within a profile in relation to the data available in public sources.

Average Precision for the 12 months to July 2024 was maintained at a very high 99.74% In addition, more than 500 recurring automated checks are performed as part of the quality assurance process on new and existing Dow Jones profiles.

Accuracy: Underpinned By Process

STRICT CONTENT DEFINITIONS

SUBJECT MATTER EXPERTS AND LINGUISTS

ACCESS TO HIGH QUALITY RESEARCH INFORMATION
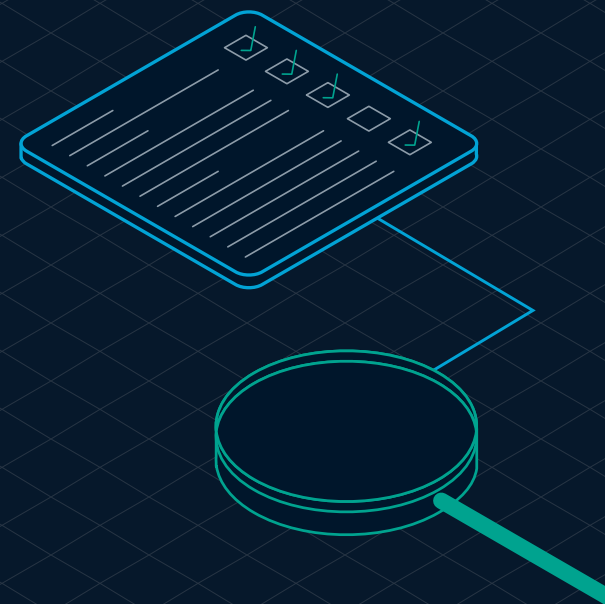
PEER AND TEAM QUALITY REVIEW

QUALITY ASSURANCE CHECKS

EXTERNAL ASSURANCE REVIEW

ACCURATE DATA

Monitoring for Completeness and Validity

The Quality Assurance team regularly monitors data for completeness. This process entails monitoring relevant news items in the Factiva news archive and publicly available sources online to ensure entities and individuals that fit Risk & Compliance coverage criteria have been correctly included in the database. The results of the monitoring are expressed by the Recall score. The average score over the 12 months to July 2024 was 99.54%. (The Precision and Recall ratios should also be seen in the context of the growth in size of the Risk & Compliance database. The number of profiles in the database continued to grow year-on-year, increasing by almost 6% in the 12 months to July 2024.)

As part of Precision and Recall monitoring, identified data issues are remedied and analyzed to confirm whether they are indicative of a broader quality issue. If a pattern is found, the Quality Assurance team will design and incorporate preventive quality controls into the quality cycle.

The Dow Jones team also looks at completeness as part of the bigger picture of validity. Constructing and maintaining a comprehensive, consolidated and actionable database of individuals and entities of interest is not simply a case of repackaging primary source information. Tenacious research is required to complete profiles and reduce the likelihood of false positives during screening.

In addition to the audits by the dedicated Quality Assurance team, Dow Jones builds in quality assurance as part of all research team workflows. These include quality efforts at time of input, system validations and proofing processes — in short, structured and consistent data quality checks.

The graph below shows the Precision and Recall trends for quality monitoring across profile types over the past ten years, and the 'accuracy' figure representing an average of the two values. We have seen a continued rise in both areas of Precision and Recall throughout the reporting period, primarily attributed to significant improvements in our quality processes, fine-tuning of our monitoring system and continuous feedback processes established with the global research teams.

PRECISION, RECALL, AND ACCURACY

■ Precision ■ Recall ■ Accuracy
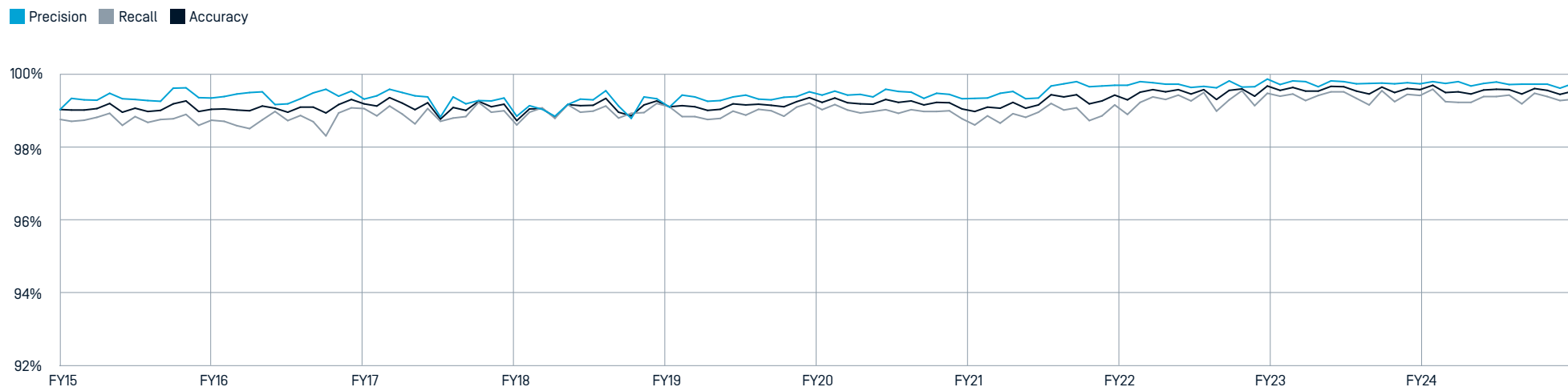
Timeliness

Data can be accurate, complete and valid, but unless it is timely the value is severely reduced as lengthy time lags can lead to increased exposure to regulatory, commercial and reputational risk. Timeliness checks are an integral part of our data quality process.

Access to Risk & Compliance data is an important component of timeliness and Dow Jones is aware of the ever-increasing demands from regulators in this area. Clients have a choice of how they access Dow Jones data and the frequency of updates they require.

- Risk data accessed via the RiskCenter or API is continually updated
- All sanctions data is consolidated into the flagship 'Watchlist' risk database, which is updated every 24 hours via the download of an XML or CSV feed. The premium Lists for Payments & Transaction Screening (LPTS) feed provides updates up to six times a day (every four hours). Subscribers can choose interval windows as narrow as four hours enhancing the ability to act on new sanctions listings in a timely manner.

Sanctions Timeliness: A Matter of Urgency

The timeliness of Sanctions data has always been imperative but sanctions arising out of Russia's aggression against Ukraine have put sanctions and sanctions compliance in the spotlight like never before. The high volume of individuals and entities being sanctioned combined with the frequency of updates from major regulators and unpredictability over the timing of sanctions updates undoubtedly put pressure on compliance professionals to have access to sanctions data in a timely manner. Dow Jones aims to process the latest priority sanctions data within one business day.

Over the 24 months from July 2022 to June 2024, Dow Jones has completed its processing of 99.99% of regular sanctions updates issued on the following lists within one business day of publication:

- OFAC Specially Designated Nationals List (SDN)
- EU restrictive measures published in the EU Official Journal
- UN Consolidated Sanctions List
- HM Treasury Consolidated List

While we highlight that we aim to process updates within one business day, updates to sanctions data are often reflected significantly more quickly in Risk & Compliance profiles.

The chart below illustrates the activity between July and June in the last three years on the lists from OFAC, the EU, UN, and HM Treasury, clearly showing the scale of the increased sanctions activity since February 2022 and how dramatically the volume of sanctions activity can vary from month to month in response to a major crisis. Activity peaked in March 2022 but we can see high levels of additions and changes in September 2022 as a result of the EU refreshing data and new sanctions by the United States, and high volumes as a result of various actions by the US and EU sanctions packages. The first and second anniversaries of the invasion saw new waves of sanctions in February 2023 and February 2024. Previous peaks in sanctions levels pale in comparison to the recent sanctions. The high volumes in June 2020 and January 2021 reflect the high volume of modifications to the information and data on subjects already on sanctions lists (on the HM Treasury list as a result of the UK's departure from the European Union, as well as a number of OFAC updates related to Iran and Hong Kong programs leading up to the start of the new U.S. administration), whereas the recent high volumes since February 2022 stem from the addition of designated parties to the lists in relation to Russia. The high volume of additions in June 2021 was the result of action against Belarus.

The term unprecedented has been used frequently to describe the level of sanctions imposed after the Russian invasion of Ukraine and the figures certainly bear this out.

The monthly average of additions to OFAC, EU, HMT and UN sanctions lists in the year July 2019 to June 2020 was 118 a month, rising to 165 a month the following year, peaking at an average of 416 a month in the year to June 2022 as a result of the sanctions against Russia-related targets. The sanctions landscape has changed dramatically since February 2022 and there are no signs that the volume or frequency of new and revised sanctions will return to the levels before February 2022, but are remaining at elevated levels. The figures for the 12 months to end June 2023 show that while the level of additions each month had fallen, to an average of 339 a month from 416 the previous year, this was still extremely high, and in the 12 months to end June 2024 the monthly average had climbed again to 395 additions, highlighting the continued emphasis on using sanctions to exert pressure on Russia or those supporting Russia evade sanctions.

Achieving the target of updating our lists in one business day is a testament to the dedication and skill of our research staff and their ability to work around the processing challenges imposed by the update format of some official lists.

MONTHLY UPDATES FOR OFAC, EU, HMT AND UN SANCTIONS LISTS*

■ Additions ■ Deletions □ Changes
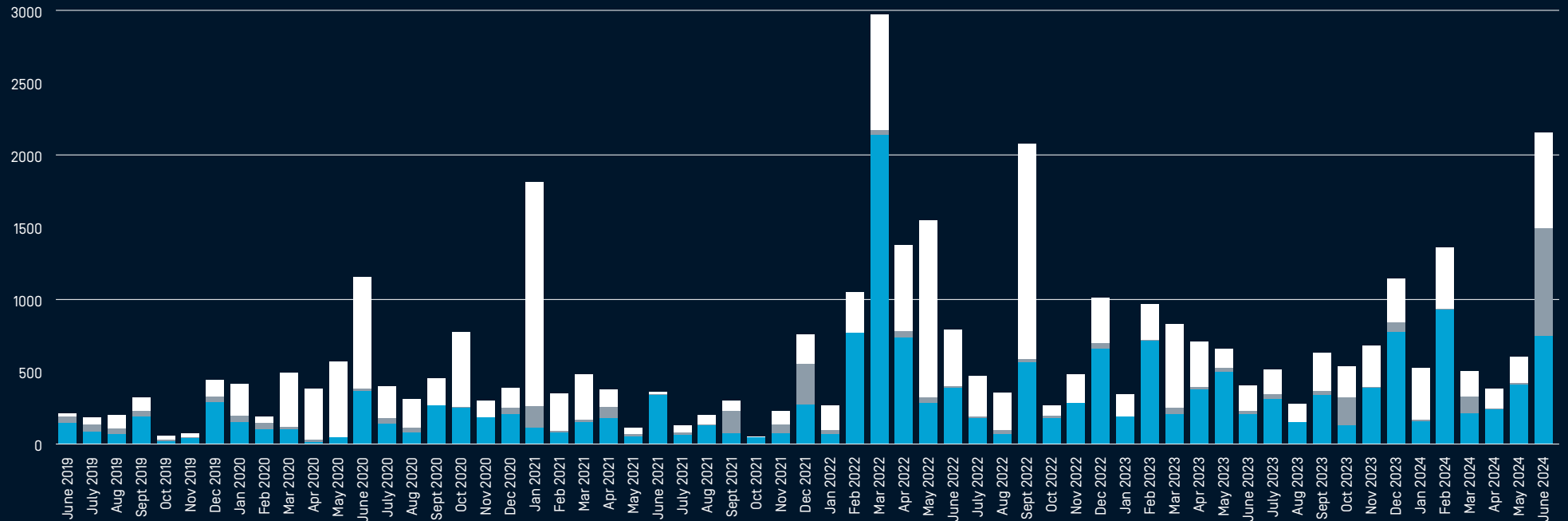
*Note that updates are counted per source so for some regulators the number may be duplicated if there is a list published in two different formats (e.g. EU Official Journal and EU consolidated file).

Sanctions Control & Ownership

The continuous use of sanctions as a foreign policy tool by OFAC, EU and UK regulators both in general and as a reaction to the invasion of Ukraine by Russia has driven the continued expansion of our Sanctions Control & Ownership (SCO) content launched in 2015. When creating and maintaining a content set, we determine a definition and over time that definition may evolve. The latter has been the case with the SCO content. Originally our definition was that a company would be included in the SCO content set if a subject sanctioned by OFAC, the EU or the UK owned a minimum stake of 10% in the company or a sanctioned individual had a possible controlling interest, either as a member of the board or as a senior executive. Subsidiaries and assets two levels down from the listed subject would be included. Since January 2023 we have expanded the scope to include subsidiaries regardless of their level in the ownership tree of subjects sanctioned by OFAC, the EU and HMT. As of July 2024 we have added to the scope sanctions content from Australia, Canada, France, Japan, New Zealand, Singapore and the United Nations in response to regulators around the world making it clear that sanctions extend beyond those directly named in restrictive measures.

The chart below illustrates the steady growth in SCO content tracking the increase in the volume of subjects sanctioned by OFAC, the EU and the UK. The spike in the number of SCO profiles at the end of 2017 was the result of changes to our categorization. The SCO definition was expanded to cover state-owned companies owned in whole or in part by the government of countries or regions which are subject to comprehensive sanctions imposed by OFAC, namely Iran, Syria, North Korea, Sudan, Cuba and Crimea. The more recent spike is a result in part of the thousands of Russian-related subjects designated since February 2022 and to our change in approach to covering subsidiaries. Prior to the end of December 2022 coverage generally contained entities down to the second level of ownership from the sanctioned subject. As of January 2023, we have been building out the content to include subsidiaries of sanctioned subjects regardless of their level of ownership. Between the addition of new content related to newly imposed sanctions and the addition of all subsidiary levels our SCO content has grown from almost 34,000 profiles on January 1, 2023 to more than 48,000 on July 1, 2024.

OFAC, EU AND UK SANCTIONED SUBJECTS VS. DISCOVERED SCO

● SAN ● SCO
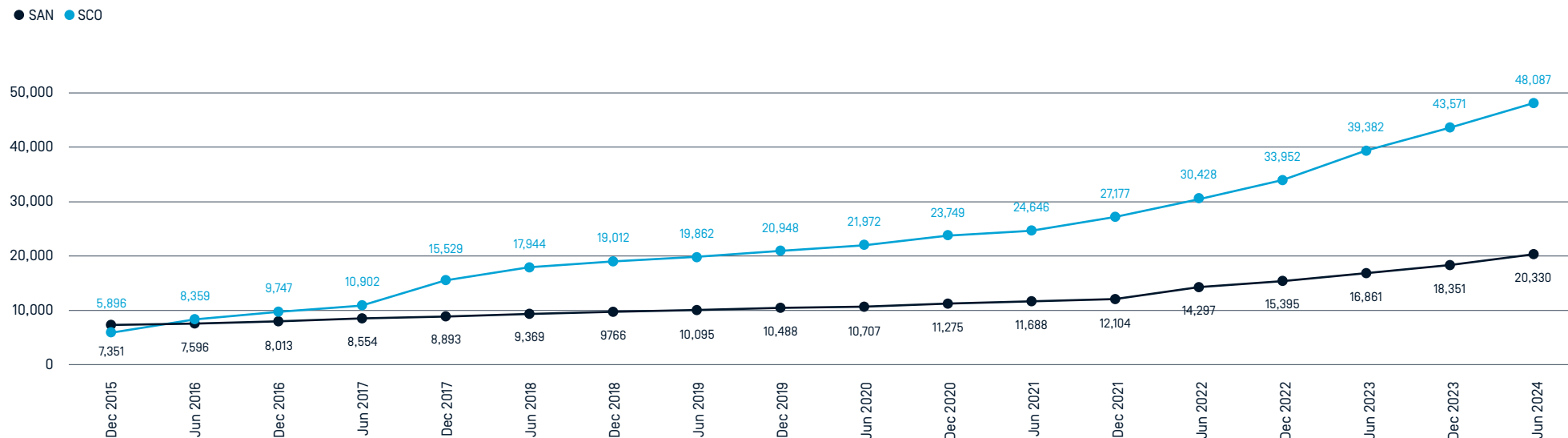
Dow Jones Data:
An Early-Warning Advantage

The creation of Dow Jones Risk & Compliance content sets has been triggered by our customers' need to respond to regulations but also a desire to get ahead of sanctions or be on top of compliance-related risks surfacing in the media.

We have seen with the SCO content set that profiles can move from being part of the universe of companies owned or controlled by a sanctioned subject to becoming themselves a sanctioned subject. We have found that more than 1,600 entities were originally

covered as sanction-owned before being directly sanctioned. On average, these sanction-owned entities were directly sanctioned about 1,000 days after being identified as part of our SCO coverage.

SCO ENTITIES TO DIRECTLY SANCTIONED

DATE OF SANCTIONS
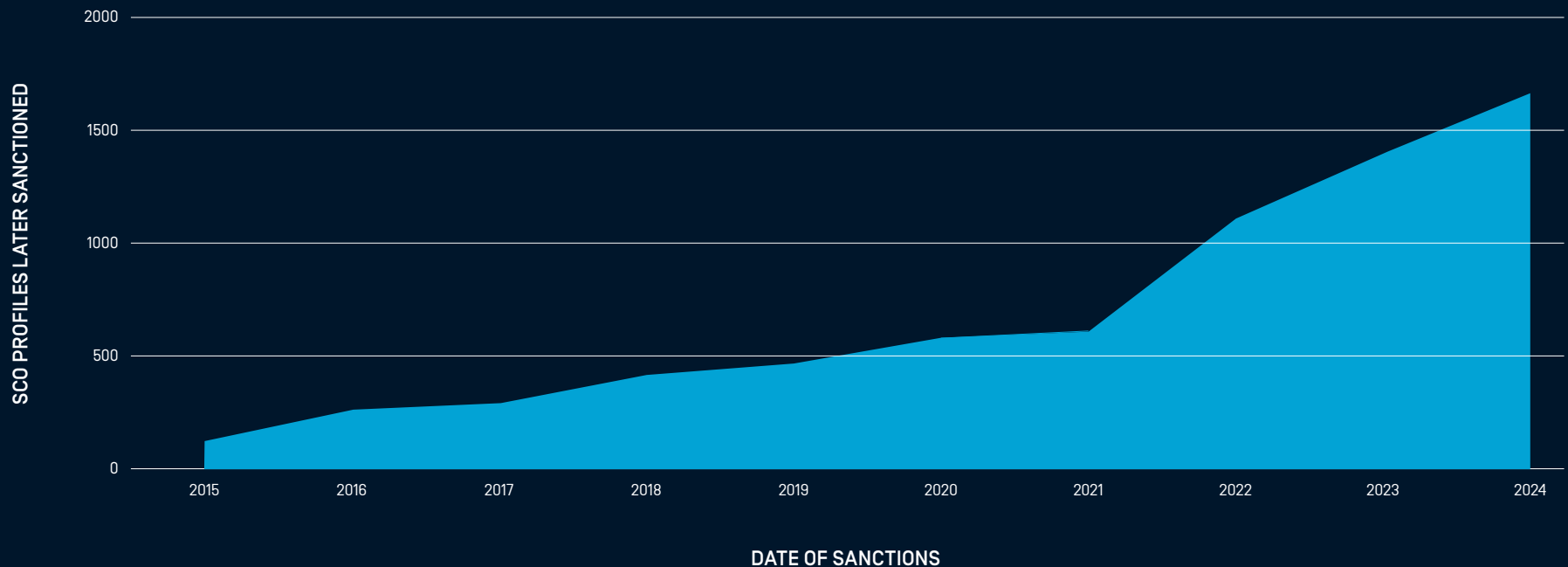
Adverse Media Entities

Adverse Media Entities (AME) currently covers over 12 years of adverse news from Factiva licensed publications with over 330,000 entity profiles and over 550,000 negative issues in 228 jurisdictions.

Dow Jones created the AME content set within Risk & Compliance in 2013, with coverage extending back to January 2012, to help our clients screen for the negative news that matters and assess risk in business relationships. AME includes structured profiles for entities that have received negative media coverage on Regulatory, Competitive, Financial, Environmental, Production, Social and Labour related topics. The coverage is based on information obtained from multi-lingual licensed content within Factiva.

Today AME combines automated identification of negative events, automated editorial task creation and automated reporting with human validation and manual research — an example of our innovative use of news as data in combination with editorial oversight. Efficiency and quality are at the heart of what we do. Our multilingual AME researchers continuously monitor adverse news and conduct research in open sources to create structured profiles.

A total of 98.6% of the AME profiles have more than two unique identifiers (such as alternative company names, company address, company URL, registration date, DUNS, Legal Entity Identifier, registration number, national tax ID and BIC code) so that our customers know whether or not their third party is the same as that in an AME profile.

Our comprehensive 12-year-plus archive of structured adverse media profiles helps eliminate non-threatening or unverified noise and avoids overlooking critical issues.

System Reliability

An important part of timeliness of data is system reliability. The corporate mission of Dow Jones is to meet and exceed the business needs and operational requirements of our customers.

Dow Jones takes product availability very seriously and our Technology teams are responsible for ensuring optimal systems capacity and availability. The company has well-defined processes for the escalation, resolution, evaluation and tracking of incidents, including Response Time Objectives reflecting the time frames in which Dow Jones will assess and provide a response to incident reports.

Employees of Dow Jones are customer-focused, with service to customers being of the highest importance. Clients are served and supported by local account teams present in more than 40 countries as well as a dedicated Risk & Compliance Specialist team, experts in the field. Clients receive the full support of Dow Jones Global Customer Service, which provides support by telephone, email, and chat during weekdays and email and chat on weekends. The team is available 363 days per year (closed on Christmas and New Year's Day). During our closed holidays, customers have access to our self-service support options. The Customer Support site, which can be accessed from RiskCenter 24/7, provides Customer Service links, Product Status, Learning resources, and Notifications, including our Risk & Compliance Product Update.

Lists Coverage: A Growth Story

One area where our dialogue and responsiveness to client needs is most obvious is in our Sanctions, Other Official and Other Exclusion Lists coverage. Requests from clients have resulted in the expansion of the content covered, requiring investments in research team resources and automated tools to monitor and maintain the data.

Each year more lists are added to the Risk Database with the result there's a growing inventory of sanctions, other official lists and exclusion lists.

In addition to the sanctions lists noted above, Dow Jones monitors almost 600 other official and exclusion lists from over 400 regulatory bodies using a thorough data collection, management and transfer methodology. As highlighted above, the data set has expanded steadily, not only in terms of organic growth within individual lists, but also as a result of lists Dow Jones has added in response to new lists being created by sanctioning bodies and customer feedback. Since June 2023 150 new sanction list references (i.e. the label used for each list) were added to Risk & Compliance. While the majority of the new sanction list references were to cover EU regulations, there were also new lists from Canada, Japan, Lithuania, Nigeria, Poland, Switzerland, the United States and Uzbekistan.

As the number of sanctions lists has grown and the number of sanction designations has increased, the number of profiles in our Sanctions Lists category has increased in tandem.

The overall total of actively sanctioned individuals and entities continues to grow, albeit at not the same pace as witnessed in 2022. The total of actively sanctioned subjects stood at over 61,000 in July 2024, up from the July 2023 total of 55,000 which had been up an unusually high 15,000 from 40,000 in January 2022.

In addition to the increase in the number of sanctions lists, 11 Other Official Lists were added from six jurisdictions; Austria, the European Union, France, Hungary, the United Arab Emirates and the United States.

Details of the lists covered and the Lists References used to identify the various lists within the database can be found here and we recommend clients subscribe to this notification via the Support area on RiskCenter. New lists can be requested via FAQ "How do I request the addition of a new sanctions/official list to Dow Jones Risk & Compliance?". The research team responds to such new list requests by determining the suitability of the list for inclusion in terms of source, content, format and update frequency and then prioritizes adding any content based on resources required and the universal value to clients.

SANCTIONS DATA PROFILES

■ Active People   ■ Active Entities   ■ Inactive Total
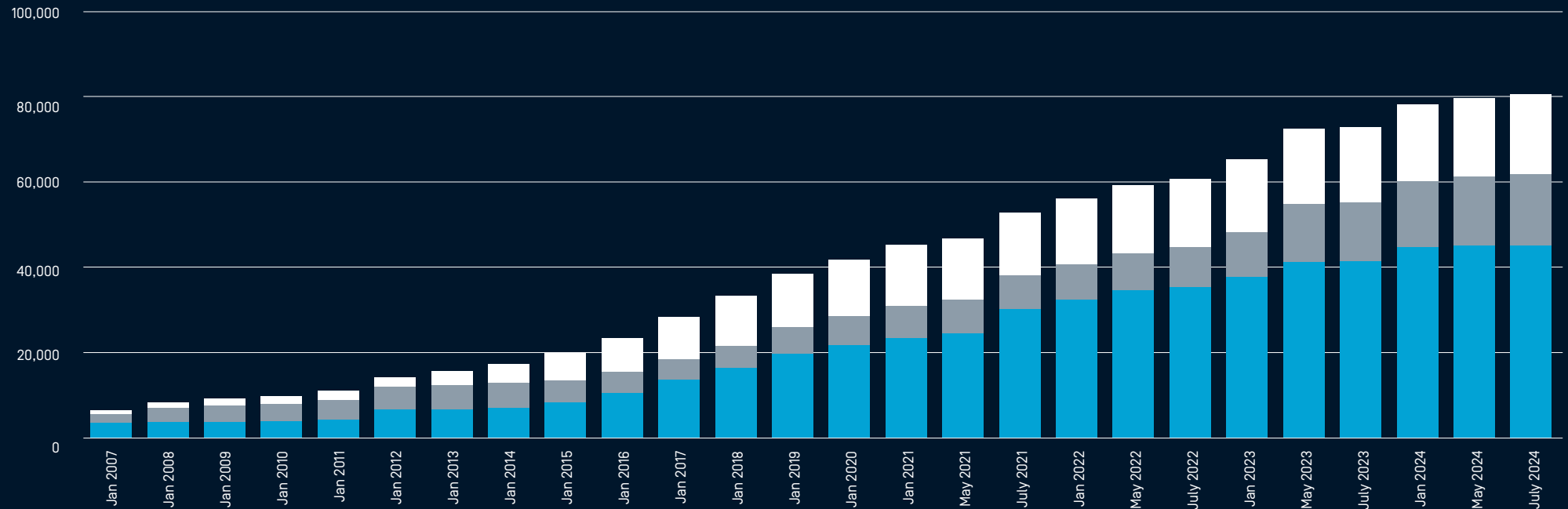
Continuous Improvement

Dow Jones is aware the data requirements of our clients are not static as business requirements and regulatory expectations change. The growth in the content sets covered by Dow Jones and the changes within content sets reflect our understanding of the changing climate and risk appetites. We welcome dialogue and partnership with our clients to shape our content and delivery.

In addition to the content enhancements mentioned at the start of this report, Dow Jones is continually innovating to provide solutions that deliver our content when and where our clients need it. We have organized our solutions under four portfolios pertaining to customer needs:

- Financial Crime Compliance
- Third-Party Risk Management
- Sanctions Compliance
- Trade Compliance

Across all of these portfolios, Dow Jones Risk & Compliance offers Due Diligence Reports and other services to assist our clients with enhanced due diligence activities.

	FINANCIAL CRIME COMPLIANCE	THIRD PARTY RISK MANAGEMENT	SANCTIONS COMPLIANCE	TRADE COMPLIANCE
Scope & Coverage	PEPs, incl. Relatives & Close Associates (RCAs) Sanctions Sanctions Control & Ownership Beneficial Ownership Adverse Media Specialist Lists (incl. VASP)	PEPs, incl. Relatives & Close Associates (RCAs) Sanctions Sanctions Control & Ownership Beneficial Ownership Adverse Media Specialist Lists	Sanctions, (incl. sanctioned vessels, vessels linked to comprehensively sanctioned countries; cities, ports and other sanctioned locations) Sanctions Control & Ownership Financial Instruments	Vessels Sanctions Sanctions Control & Ownership Dual-Use Goods Military End Use Associated Entities Specialist Lists Sanctioned Locations
Delivery & Applications	**For onboarding and ongoing monitoring:** Data feed, APIs | Online tool: RiskCenter | Financial Crime | Installed system or SaaS: Advanced Screening & Monitoring | Adverse Media Screening **For investigations and enhanced due diligence:** Online tool: RiskCenter | Financial Crime | Integrity Check **For payments & transactions screening:** Data feed, API | Specialized data feed | Sanctions for Payments Transactions Screening	**For end-to-end workflow implementation:** Online tool: RiskCenter | Third Party **For screening and ongoing monitoring:** Data feed, API | Online tool: RiskCenter | Third Party **For investigations and third-party due diligence:** Online tool: RiskCenter | Third Party	**For onboarding and ongoing monitoring:** Data feed, API | Online tool: RiskCenter | Financial Crime **For payments & transactions screening:** Data feed, API | Specialized data feed | Lists for Payments & Transactions Screening	**For screening:** Data feed, API **For manual due diligence and advanced vessel tracking:** Online tool: RiskCenter | Trade Compliance
Due Diligence Research	Enhanced Due Diligence | Third Party Due Diligence (ABAC compliance) Reputational Risk | Specialist Research |			

Notable Product Enhancements

RiskCenter

Over the last year we have continued to add enhancements to our RiskCenter Financial Crime online product, which our customers use to perform due diligence against our high quality Risk & Compliance database. In addition to allowing research of our Watchlist, State-Owned Companies and Adverse Media data sets, this product includes access to Ultimate Beneficial Ownership data, Marijuana-Related Businesses and Money Services Businesses. New features include the ability for customers to create and then screen against a private list of names (e.g. names not necessarily within the Dow Jones dataset but names which the customer wishes to be alerted on, should they be screened at some future point), and the addition of further newsletters to the Dashboard page to ensure users of RiskCenter Financial Crime and Factiva gain the additional news and commentary-related insight they need.

RiskCenter Screening & Monitoring

Two new features stand out for this product recently: deeper audit trail insight whereby the customer can view recent changes to screening settings, and improved insight into which users are performing bulk uploads into the tool. Both of these features give customers greater clarity into how their users are using the product, not only for professional insight but also to ensure robustness of the audit trail.

RiskCenter Advanced Screening & Monitoring

Following the launch of this product in 2023, we have continued to enhance the product in line with customer feedback: the ability to export names and results in bulk from within the tool — allowing deeper reporting and analysis outside of the product — and also bulk deletion capabilities, when for example customers perform screening tests as they configure their accounts.

RiskCenter Third Party

This is our platform aimed specifically at managing third-party risk — i.e. formal risk assessment based on a customer's specific criteria, including the ability to send questionnaires to third-parties in order to better understand the risk level. Enhancements to this product continue, including increased efficiencies when ordering Enhanced Due Diligence reports and also the ability to send reminders to questionnaire recipients if the questionnaire remains unreturned.

Integrity Check

Earlier in 2024, we launched Integrity Check, an AI-powered research platform that enables organizations to quickly build an investigative due diligence report covering multiple sources, including Dow Jones profile data and Factiva content, where licensed for AI use.

Dow Jones Integrity Check is a fully automated solution that goes beyond screening to identify risks and red flags from thousands of data sources.

Harnessing cutting-edge generative AI, natural language processing (NLP) and entity resolution technologies from AI firm Xapien, Integrity Check extracts and summarizes large volumes of information into intuitive reports that are quick and easy to digest. The platform significantly reduces false positives, saving compliance professionals valuable time and resources.

Integrity Check is designed with regulatory guidance in mind, incorporating proactive safeguards against hallucinations and continuous product review to ensure trustworthy, unbiased results. The outputs are fully sourced and auditable, with links to the original articles and records for further interrogation.

APIs and Feeds

Our aim is to provide content in the format most convenient for our customers, be it online or for integration into other systems. With that in mind, we have continued to improve our integration offerings, including within our APIs the provision of an instance in the European Union, allowing customers to store their name data in the EU, in line with their data privacy requirements; within our feeds business the launch of the Financial Instruments feed and also VASP feed, as referenced earlier in this report.

Keeping Customers Informed

In addition to dialogue with clients and the enhancements made in response to client needs, Dow Jones strives to keep subscribers informed on content and product changes. We communicate enhancements to Risk & Compliance products and content via a monthly Product Update. A link to the Update is emailed to clients and also is available on the Customer Support Site, alongside the other Risk & Compliance user resources such as the Product Status page, Product Alerts and FAQs. We provide the Product Update in nine languages.

Dow Jones Risk & Compliance appreciates your business and extends our commitment that we will provide the best data to cover the risks that concern you the most. Should you have any suggestions, questions or concerns about Risk & Compliance, please contact us via email at service@dowjones.com.
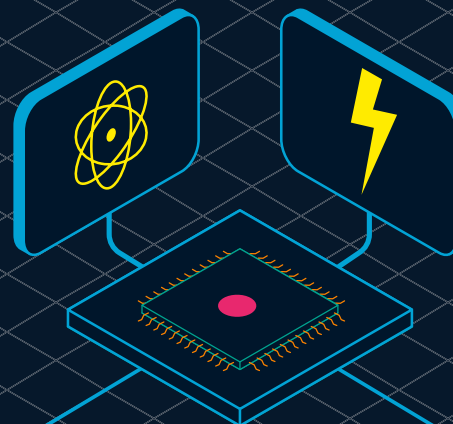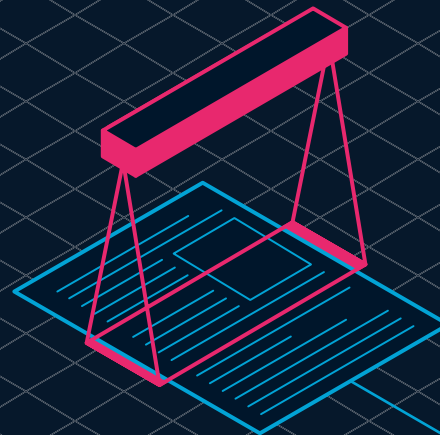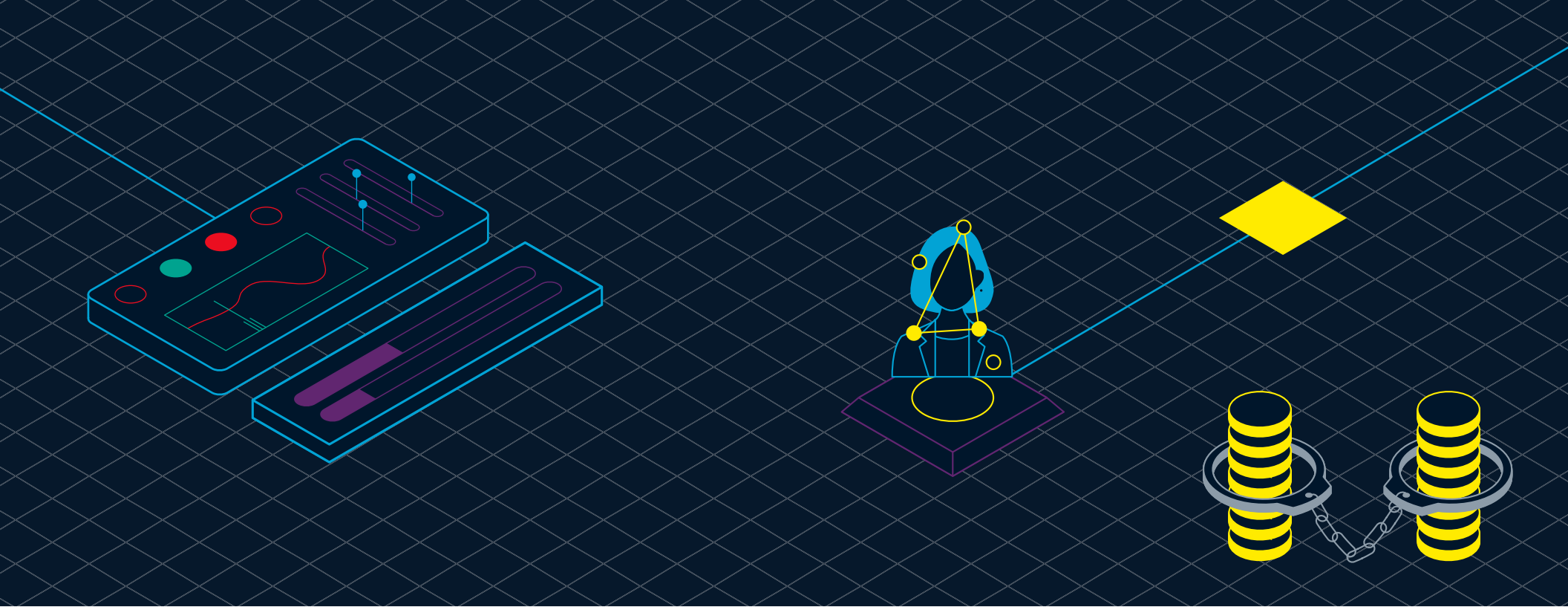
Dow Jones engages a third party on an annual basis to undertake the ISAE 3000 Reasonable Assurance Report on the Dow Jones Sanctions Platform and Data Set. The ISAE 3000 is a widely recognized standard used by accounting firms to independently assess Management's assertion on the design and implementation of effective controls.

Dow Jones is proud to share a copy of the ISAE 3000 report upon request.

DOW JONES
RISK &
COMPLIANCE