2020 Data
Quality Report

**DOW JONES
RISK &
COMPLIANCE**

LETTER FROM GUY HARRISON

Welcome to the 2020 Dow Jones Risk & Compliance Data Quality Report, sharing information and statistics about our performance over the previous year. We value the 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. Since 2000 our Risk & Compliance team has focused on supporting 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 to help organizations with their programs 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. This has never been more important to us and to our clients, as new technologies are providing access to a wealth of new sources and information, not all of which are as reliable or as trustworthy as before. We will endeavor to make sure that our data meets the most rigorous quality standards. Investment in quality data is imperative to running not only an effective compliance program but doing so at a sustainable cost.

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 take risk decisions more quickly and with more confidence.

It is essential for compliance-related services to be both high-quality and reliable, and this has never been more true than during the recent COVID-19 pandemic. To ensure continuance of service, the Dow Jones global response team quickly activated business continuity plans across all teams and services. We moved to protect our people with a swift pivot to remote work for all of our teams, so we could continue to help you manage risk and stay compliant during this unprecedented time. We are confident that our research team is fully equipped to navigate this scenario long-term.

This year's report highlights the successes of our research team over the past year. Recent examples of our timely reaction to customer requirements:

- COVID-19 Resources - these include an Adverse Media Entities standalone report with a list of companies impacted by coronavirus-related negative media to help customers identify and manage their supply chain risk.

- Growth of Sanctions Control & Ownership Content - in response to an increasingly active sanctions environment, including the OFAC and EU 50% rules, Dow Jones now covers more than 40 sanctions programs including more than 22,000 entities and bank branches, 2,000 of which were added over the past year.

- Additional lists - content coming under the Sanctions and Other Official Lists data sets continues to grow with the addition of lists arising out of new legislation or added as a result of client focus

- Expanded Trade Compliance data - Dual-use Goods data is bundled with other datasets (vessels, sanctions and others) in RiskCenter Trade Compliance.

Thought leadership is another facet of the Dow Jones offering. Over the past year, we have broadened our thought leadership offerings 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.

- Specialized Due Diligence Reports to help clients with the U.S. export control restrictions involving certain military end uses and end users in China, Russia and Venezuela. The rule, which came into effect in June 2020, expands export control restrictions under the Export Administration Regulations (EAR) Section 744.21.

- Risk & Compliance blog 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, including our new online RiskCenter Financial Crime interface. Please see page 21 for details on this and other products.

We appreciate your trust and financial investment and give you our commitment that we will continue to provide the very best data to cover the risks that concern you the most.

Guy Harrison
Managing Director
Dow Jones Risk & Compliance
September 30, 2020

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 that emphasizes quality, innovation and customer service
- A clear definition of coverage
- A large team of skilled, experienced multilingual researchers and quality analysts
- 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 that it can be difficult to accurately compare 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. 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 has never been more 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 that they expect to be there and not receive matches on content that is not relevant to their business.

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 open source 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. For example, the percentage of Risk & Compliance profiles with no secondary identifiers now stands at just 2% compared with 28% in 2008 against a background of a continuously expanding volume of profiles. In the same period, the percentage of Risk & Compliance profiles with two or more secondary identifiers has reached 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 and date of birth.

Since 2008, the number of profiles has increased from 530,000 to 3.2 million in August 2020, up from 2.9 million in August 2019. Dow Jones has emphasized continuous quality improvement 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 has continued to rise despite the high number of PEP profiles created each year. The current ratio of 63.4% compares with a ratio ten years ago of 47% and five years ago of 60%.

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 DATE OF BIRTH

*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
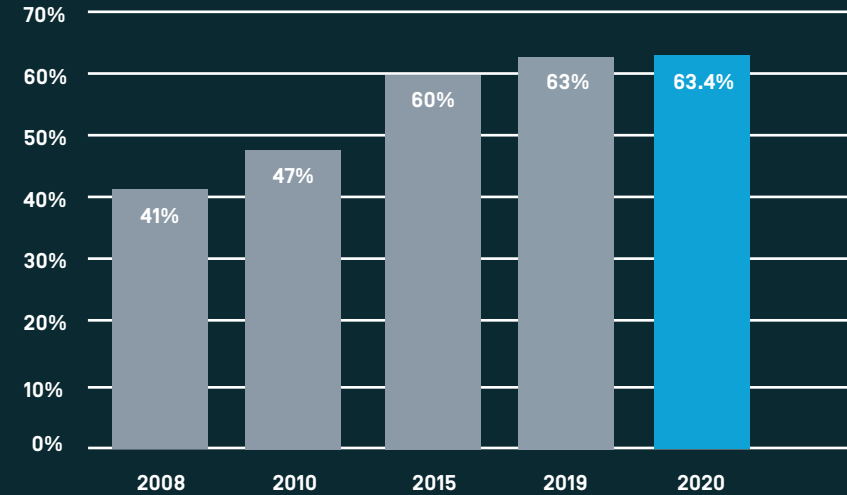
PEP PROFILES GROWTH

*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

Our risk category table sets out Dow Jones coverage of risk categories. Each risk category was 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. Archive goes back to 2001.	✓	
SUBJECTS ON SANCTION LISTS	More than 50 sanctioning bodies*	✓	✓
SUBJECTS ON OTHER OFFICIAL LISTS	More than 400 other official lists*	✓	✓
SUBJECTS ON OTHER EXCLUSION LISTS	More than 90 lists*	✓	✓
SANCTIONS CONTROL & OWNERSHIP (50% RULE)	Companies owned or controlled by people or entities sanctioned by the U.S. Office of Foreign Assets Control (OFAC) or the European Union: • 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)		✓
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 comprehensively sanctioned countries are included: Cuba, Iran, North Korea and Syria. There are currently over 1,100 such vessels.		✓
PEOPLE WITH ADVERSE MEDIA/NEGATIVE NEWS (SIP)	People who are reported (on Factiva) to have been formally accused, arrested or convicted of: • Corruption • Organized crime • Trafficking • Financial crime • Tax crime • Terror	✓	
RELATIVES OF PEP	31 categories of family members	✓	
CLOSE ASSOCIATES OF PEP	11 categories of close associates	✓	

*As of July 2020.

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.)

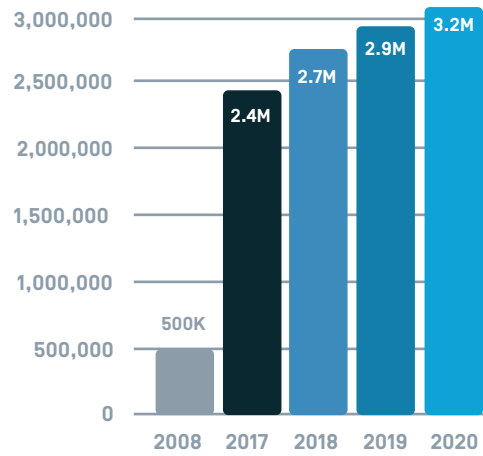| RISK CATEGORY	DESCRIPTION	COVERS PEOPLE	COVERS ENTITIES
STATE-OWNED COMPANIES (SOC)			
GOVERNMENT OWNED OR CONTROLLED CORPORATIONS	Corporations owned by federal, regional or municipal governments in every country. The archive goes back to 2008.		✔
ADVERSE MEDIA ENTITIES (AME)			
ENTITIES WITH ADVERSE MEDIA OR NEGATIVE NEWS	Profiles of entities with a corporate structure and commercial purpose that have had adverse/negative media coverage (on Factiva) falling into one or more of 17 categories in four broad areas: • Regulatory • Environmental/Production • Competitive/Financial • Social/Labour		✔
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.		✔
SPECIALIST LISTS			
MARIJUANA-RELATED BUSINESSES	Licensed marijuana companies and their associated people and entities 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.	✔	✔
MONEY SERVICES BUSINESSES	Entities and individuals that are licensed providers of money transfer services, including currency exchange, check cashing and issuing, cashing or selling money orders in Canada, Hong Kong, Malaysia, Singapore, and the United States.	✔	✔
TRADE COMPLIANCE			
DUAL-USE GOODS	A dataset comprising match phrases and goods codes used to describe dual-use goods and related information for use in trade compliance screening and related systems.		✔
ADDITIONAL RISK DATA**			
BENEFICIAL OWNERSHIP	Dow Jones Beneficial Ownership is sourced through Dun & Bradstreet and contains beneficial owners for approximately 69 million entities. 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.	✔	✔
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.		✔

*As of July 2020.

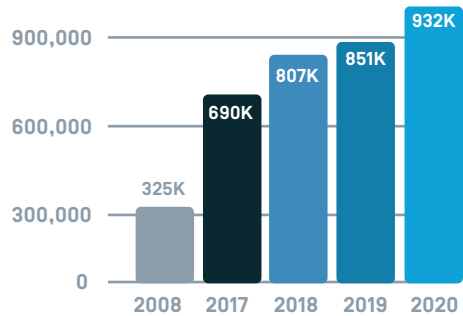**These additional data sets are not in the scope of the data quality work detailed below.

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.)

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:
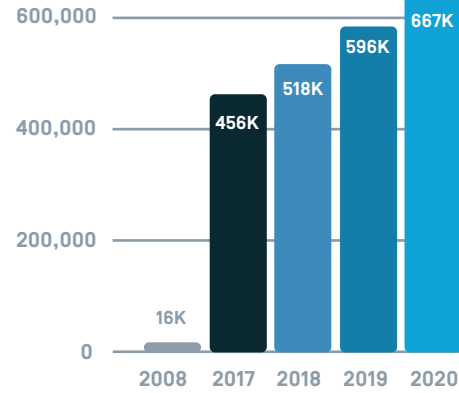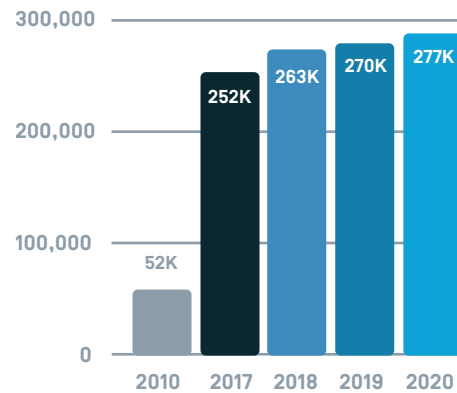
OVERALL RISK & COMPLIANCE GROWTH

Year	Value
2008	500K
2017	2.4M
2018	2.7M
2019	2.9M
2020	3.2M

SPECIAL INTEREST PERSONS (SIP)

Year	Value
2008	16K
2017	456K
2018	518K
2019	596K
2020	667K

ADVERSE MEDIA ENTITIES (AME)

- Profiles covering adverse media issues
- Adverse media issues

Year	Profiles covering adverse media issues	Adverse media issues
2014	17K	28K
2017	119K	216K
2018	140K	250K
2019	161K	288K
2020	185K	333K

POLITICALLY EXPOSED PERSONS (PEP)

Year	Value
2008	325K
2017	690K
2018	807K
2019	851K
2020	932K

STATE OWNED COMPANIES (SOC)

Year	Value
2010	52K
2017	252K
2018	263K
2019	270K
2020	277K
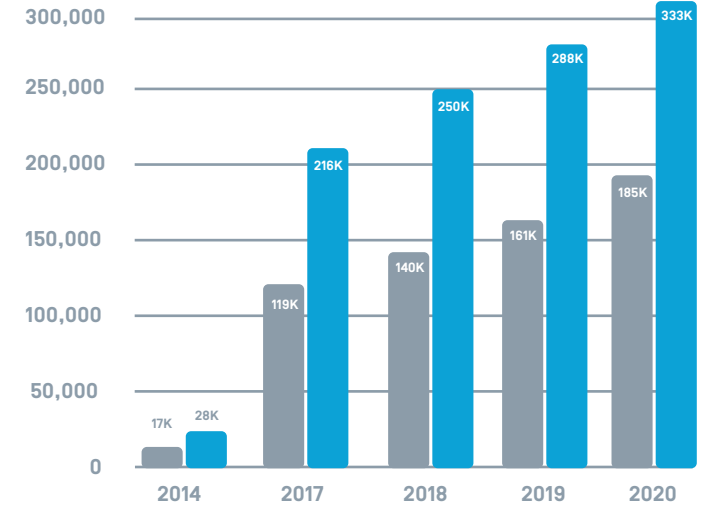
A NOTE ABOUT PEP LISTS

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 been considered when drawing up the Dow Jones PEP definition.

However, as the Financial Action Task Force (FATF) 2013 recommendations mention, these lists have potential shortcomings as they may not be complete (lacking names, identifiers, relatives), and are quickly outdated, observations our experience confirms, hence we do not rely on them solely.

Very few countries have published a list of names of domestic PEPs. One recent example is Brazil, where the government issued a list containing the names of approximately 70,000 domestic PEPs in September 2019. The list has since been updated several times. All the individuals included in the current and past versions of this list have a PEP profile in Risk & Compliance.

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 to leverage Factiva, the Dow Jones archive of 33,000 sources in 28 languages. More than 1 million articles from these reputable sources are added to Factiva daily, many of which are otherwise accessible only via paid subscription. In some cases, the archive 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. Sources also include government and other official websites. As detailed above, the research team also maintains data for over 1,300 List References (Sanctions Lists, Other Official Lists, Other Exclusion Lists) sourced from over 400 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 innovating with the use of automation to augment the research team's data discovery 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 issues for coverage. Our research team is well positioned to work with Dow Jones data scientists and specialists to refine the AI and ML tools at their disposal to focus on compliance data.

We use AI and ML 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.
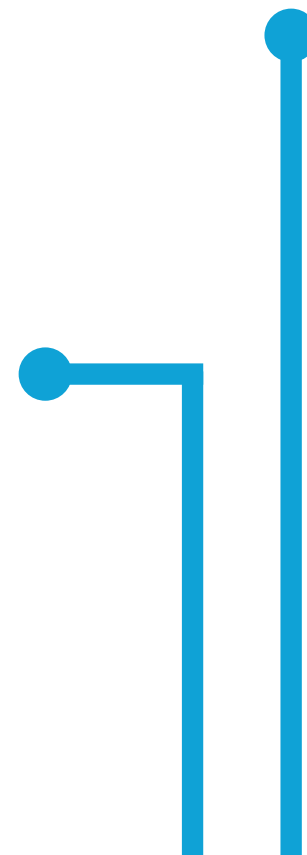
QUALITY ASSURANCE

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.

QUALITY ASSURANCE: FOUR FACTORS, THREE LAYERS AND REVIEW

To measure the four factors - accuracy, completeness, validity and timeliness, 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 R&C 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.
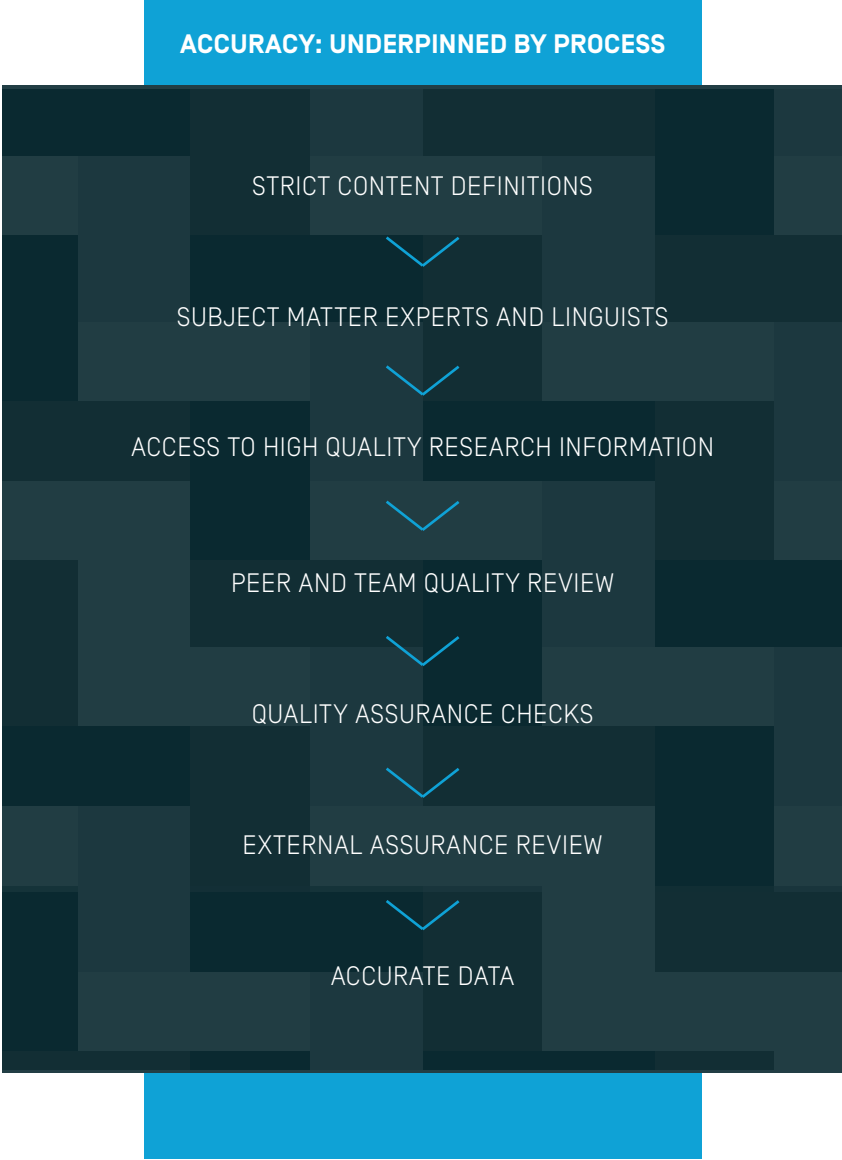
MONITORING FOR ACCURACY

The Quality Assurance team samples a portion of new and changed profiles to maintain high levels of data precision. Each field within a sampled record 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.

Average Precision for the 12 months to June 2020 was maintained at a very high 99.33%

In addition, almost 500 quality checks are performed as part of the accuracy assurance process on new and existing Dow Jones profiles.

Dow Jones also engages a third party to conduct an annual sanctions data reconciliation exercise. This involves comparing the data on a number of official sanctions lists with the data stored in the Dow Jones sanctions database. The 2020 report's key finding was an accuracy rate of 99.99% when comparing Dow Jones name and alias data to six significant sanctions lists.

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 Dow Jones team monitors data for completeness in several ways. A Recall score is given, as mentioned, and the average score over the 12 months to June 2020 was 98.78%. (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 grew by over 10% in the same period). In addition, we perform regular sampling activities, checking for relevant news articles in Factiva and the internet then cross-checking to ensure profiles exist on the Risk & Compliance database for particular categories.

As part of Precision and Recall monitoring, incorrect items are corrected and if an error/omission spotlights a potential issue, the Quality team will include systematic checks in our quality cycle to ensure the issue does not reoccur.

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, proofing processes, field level surveying -- in short, structured and consistent data quality checks.

The graph below shows the Precision and Recall trends for quality monitoring across record types since January 2010, and the averaged 'accuracy' figure. 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 the expansion of our global research team.

PRECISION, RECALL, AND ACCURACY

■ Precision ■ Recall ■ Accuracy
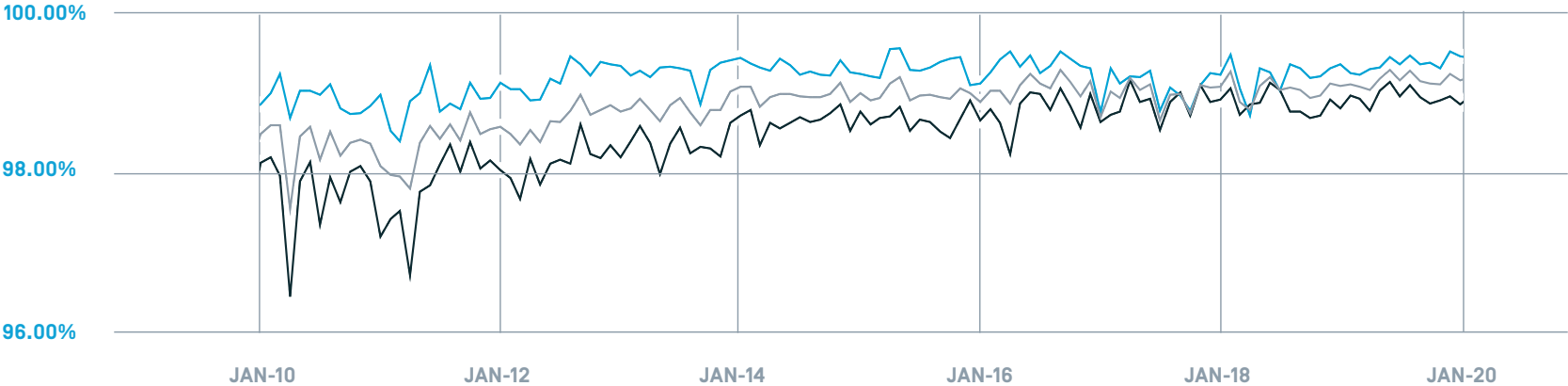
TIMELINESS

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 targets are included in research team performance objectives for each Risk & Compliance data set. Whether the content covers PEP updates from national or regional elections, ownership information associated with newly-sanctioned subjects from OFAC or the EU or updated Sanctions Lists, the appropriate timeliness targets are reviewed and monitored.

Access to Risk & Compliance data is an important component of timeliness.

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 feed provides updates up to six times a day (every four hours). This is an enhancement introduced in 2018, based on customer feedback, from the previous frequency of up to three times a day. The improved frequency, where subscribers can choose interval windows as narrow as four hours, minimizes the chance that a firm's counterparty has sanctions listings that the firm does not know about, and can make the difference in ensuring a prohibited transaction does not leave the organization.

SANCTIONS TIMELINESS: A MATTER OF URGENCY

The timeliness of Sanctions data is imperative. Over the 24 months from June 2018 to June 2020, Dow Jones has completed its processing of 99.9% 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 ISIL (Da'esh) & Al-Qaida Sanctions List

- UN 1988 Sanctions List (Taliban/Afghanistan)

- HM Treasury Consolidated List

Despite the global COVID-19 pandemic, the past 12 months have been characterized by a significant increase in regulator activity; for the period July 2018 - June 2019 sanctions lists issued by the UN, OFAC, EU and HMT updated every 37 minutes on average; in the period July 2019 - June 2020 it was every 22 minutes. This increase in activity has resulted in updates being published more frequently (up by 12% year on year for the comparison period), as well as more items per update, with the total number of additions, deletions and changes increasing by 152% year on year. New OFAC programs have been added targeting subjects from Syria, Venezuela, Nicaragua and Russia, and whilst there have been fewer completely new SDN designations in 2019-2020, this is not surprising given that the 2018-2019 period saw the biggest ever single-day action by OFAC when 773 Iran additions were issued back in November 2018.

The main driver behind the 2020 spikes is the huge 228% increase in the number of changes published. These have included OFAC's administrative update of 490 North Korea-related targets, a full review and update of the UK's Afghanistan asset freeze list, and changes to Syria-related designations enacted by the EU, and subsequently the UK. This highlights the importance of keeping up with regulatory activity, even if data already exists.

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.

The chart below shows the breakdown of monthly updates for OFAC, EU, HMT and
UN sanctions lists for the period June 2018 - June 2020. The number of updates to
Sanctions data profiles can vary dramatically from day to day and month to month.
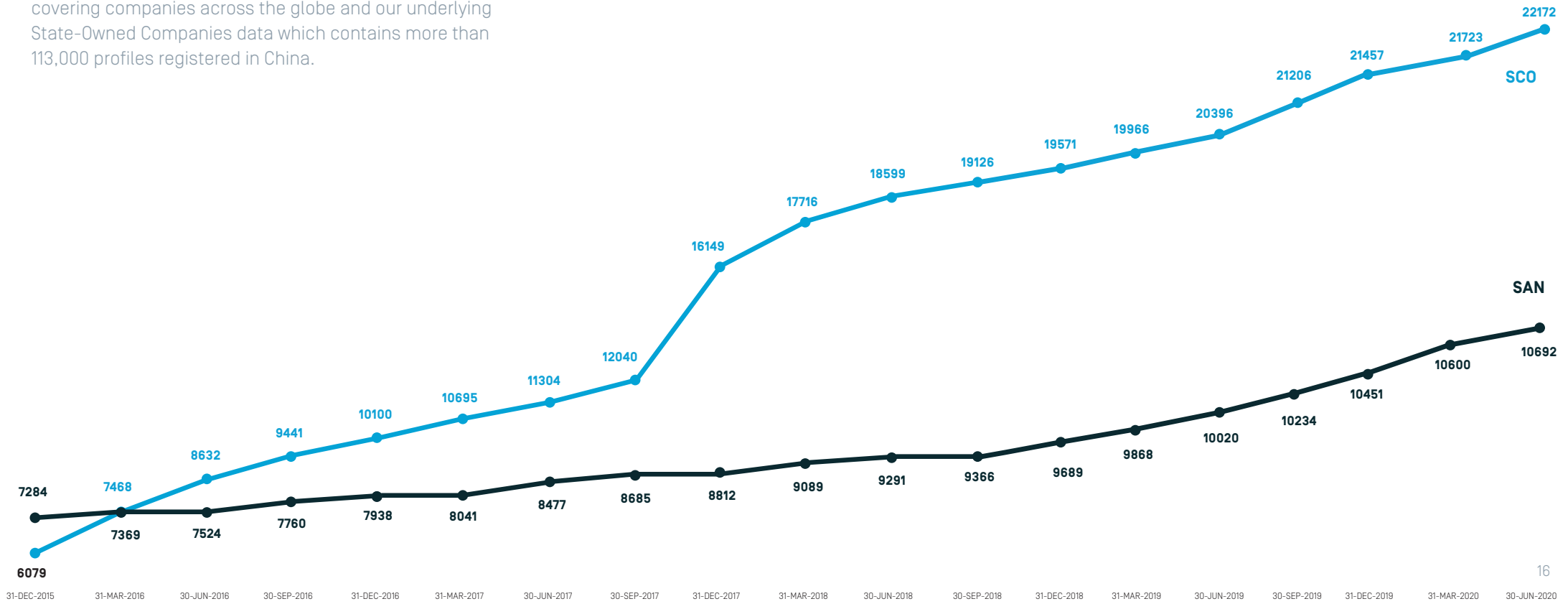The chart illustrates the overall growth trend over the past two years.

- ■ Changes ■ Deletes ■ Adds
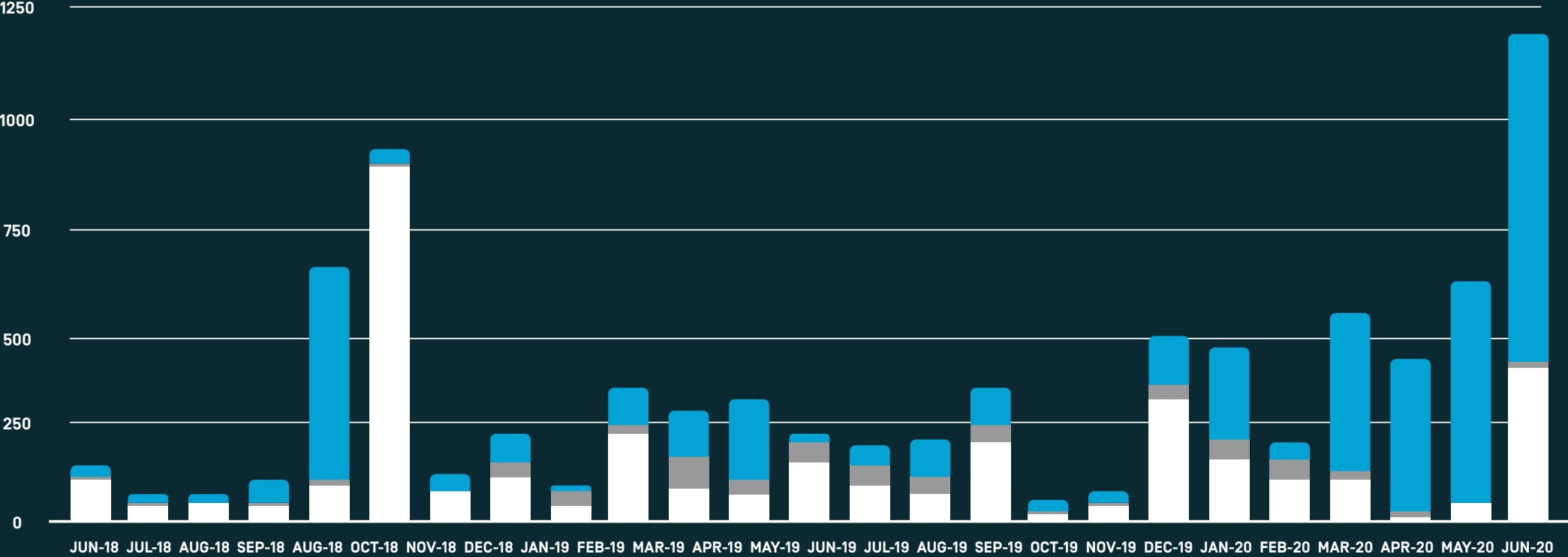
Changes to sanctions lists also mean changes for sanctions ownership, which is why our Sanctions Control & Ownership (SCO) content has seen a 8.7% increase in profiles in the last year as a result of the aforementioned additions and changes to OFAC and EU sanctions lists. A company is included in the SCO content set if a subject sanctioned by OFAC or the EU has a minimum stake of 10% in the company or a sanctioned individual has a possible controlling interest, either as a member of the board or as a senior executive.

We expect to see a continual upward trend throughout the coming fiscal year as recent sanctions applied to subjects in China have resulted in the addition of a significant amount of new SCO content. Dow Jones is well positioned to onboard this content at pace owing to our experience covering companies across the globe and our underlying State-Owned Companies data which contains more than 113,000 profiles registered in China.

The chart illustrates the steady growth in SCO content tracking the steady growth in the volume of subjects sanctioned by OFAC and the EU. 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 or the EU, namely Iran, Syria, North Korea, Sudan, Cuba and Crimea.

SCO

SAN

22172
21723
21457
21206
20396
19966
19571
19126
18599
17716
16149
12040
11304
10695
10100
9441
8632
7468
6079

10692
10600
10451
10234
10020
9868
9689
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9089
8812
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7284

31-DEC-2015 31-MAR-2016 30-JUN-2016 30-SEP-2016 31-DEC-2016 31-MAR-2017 30-JUN-2017 30-SEP-2017 31-DEC-2017 31-MAR-2018 30-JUN-2018 30-SEP-2018 31-DEC-2018 31-MAR-2019 30-JUN-2019 30-SEP-2019 31-DEC-2019 31-MAR-2020 30-JUN-2020

DOW JONES DATA: AN EARLY-WARNING ADVANTAGE

The creation of Dow Jones Risk & Compliance content sets has been triggered by a 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 535 entities were originally covered as sanction-owned before being directly sanctioned. On average, these sanction-owned entities are directly sanctioned about 673 days after being identified as part of our SCO coverage.

SCO is not the only content to provide an early warning of sanctions risk. Monitoring adverse news is essential to identify potential red flags before regulatory action has taken place.

For example, media reports that Huawei Technologies Co. Ltd. had allegedly exported technological goods to Iran, North Korea and other sanctioned nations were already included in the Adverse Media Entities (AME) profile for the company in 2016. That was three years before the U.S. Department of Commerce added Huawei Technologies Co. Ltd. and 70 affiliates to the Bureau of Industry and Security (BIS) Entity List, the list citing subjects for activities contrary to U.S. national security and/or foreign policy interests.

In another example, on 22 May 2020, the U.S. Department of Commerce flagged it would be adding 33 Chinese companies to two different trade watchlists for activities that run contrary to U.S. national security and foreign policy interests, including their connections to the People's Liberation Army (24 entities in total) and human rights abuses in the Xinjiang Uighur Autonomous Region (9 entities in total). The media were reporting on this announcement and the companies fitting the Adverse Media Entities coverage were included in the content set days before the official designations were published in June.

Likewise, the Special Interest Persons (SIP) content set includes individuals who are profiled as SIP prior to being sanctioned by OFAC. In the last year, of the SIP profiles available before they were listed by OFAC, the profiles were created on average 1,500 days before the subject was designated. The designations include subjects listed under the Global Magnitsky program, Foreign Narcotics Kingpin Sanctions Regulations and Global Terrorism Sanctions.

SCO PROFILES LATER SANCTIONED
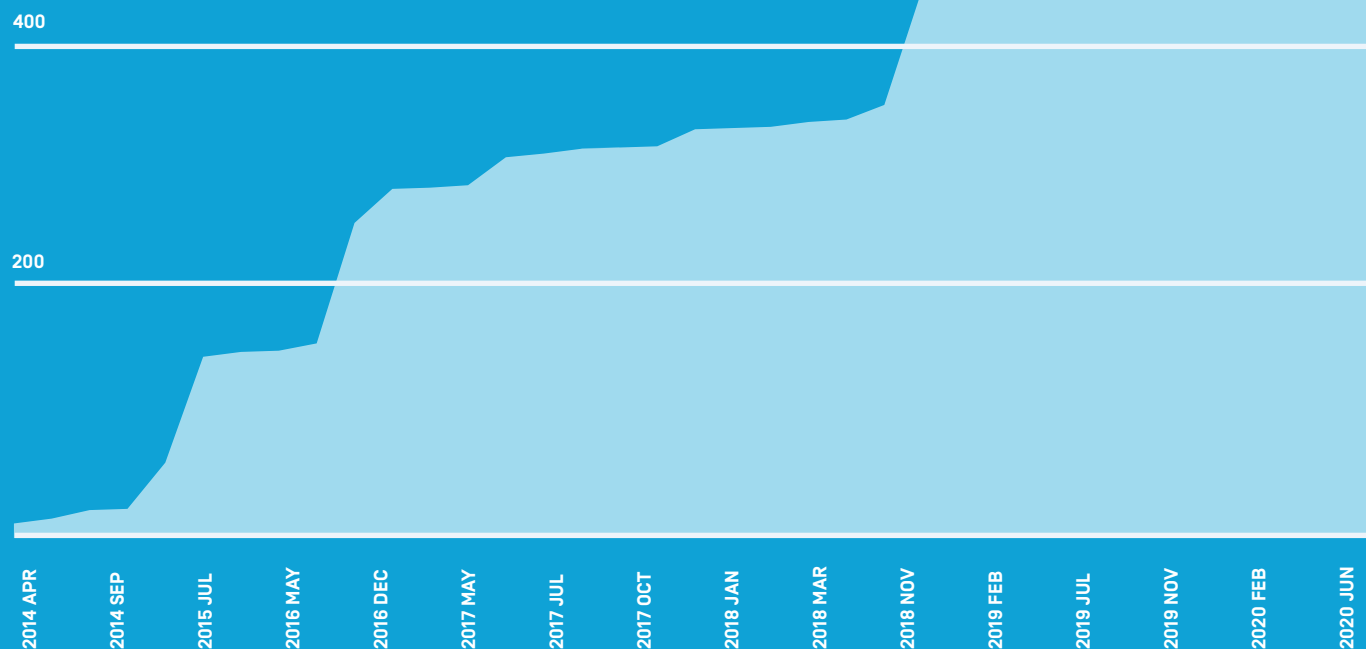
ADVERSE MEDIA ENTITIES: AHEAD OF THE CURVE

As the coronavirus was taking hold, in response to client queries, Dow Jones Risk & Compliance created a standalone report with a list of companies impacted by coronavirus-related negative media to help customers identify and manage supply chain risk.

The list of companies was obtained from the Adverse Media Entities (AME) content set, as it monitors media reports on companies suspending operations, being affected by supply chain disruptions or having severe financial issues because of the coronavirus situation worldwide.

The report was published weekly between March and the end of June and it was provided to existing Adverse Media Entities clients at no additional charge. The final version included 3,800 companies worldwide with 4,800 coronavirus-related issues. Transportation/logistics firms (including airlines), automotive, retail and hospitality were among the most impacted industries.

The COVID-19 report is just one example of the value of Adverse Media data. Adverse Media monitoring is recognized by regulators as an integral part of the customer due diligence process. The use of negative news from reputable sources can be instrumental in complying with anti-corruption and anti-money laundering regulations and in assessing risk in business relationships.

Missing important updates in the adverse/negative media space might cause regulatory risk or reputational issues, and processing such information quickly, accurately and with an enormous amount of unstructured text is highly complex, time-intensive and costly.

To address this challenge, Dow Jones created the AME content set within Risk & Compliance in 2012. The Adverse Media Entities coverage is based on information obtained from multilingual licensed content within Factiva. The content set includes entities with a corporate structure and a commercial purpose that have received negative media coverage in any of our 17 risk categories in any country in the world.

The Adverse Media Entities data set currently covers 185,000 entity profiles with 333,000 negative issues in 228 jurisdictions, including over 20,000 adverse issues for financial institutions.

A total of 97% 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, tax ID and BIC code) so that customers can know whether or not their third party is the same as that in the AME profiles and whether or not they're involved with an entity representing a risk to their business.

Each month approximately 2,000 new AME profiles are created and over 3,000 new negative issues identified.

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 also receive the full support of Dow Jones Global Customer Service, which provides customer service and technical assistance and is available 24/7 by telephone, email and chat. The recently enhanced Customer Support area available from RiskCenter provides Customer Service links, Product Status, Learning resources and other information.

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.

Lists were added to the Risk Database in 2002, and since then new sanctions and other official lists and exclusion lists have been added every year. The extent of the archive varies per list.

In the 12 months since July 2019 one hundred and fifteen new Sanctions and Other Official list references have been added from twenty six jurisdictions including Argentina, Australia, Bahrain, Brazil, Brunei,

Canada, China, India, Indonesia, Luxembourg, Malta, Mexico, Peru, Romania, Russia, Taiwan, U.A.E., U.S., as well as the United Nations and European Union. They were added as a result of requests from our clients or regulatory changes.

As the number of lists has grown, the number of profiles has increased in tandem.

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 FAQ 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 value to clients.

SANCTIONS DATA PROFILES

■ Inactive Total   ■ Active Entities   ■ Active People
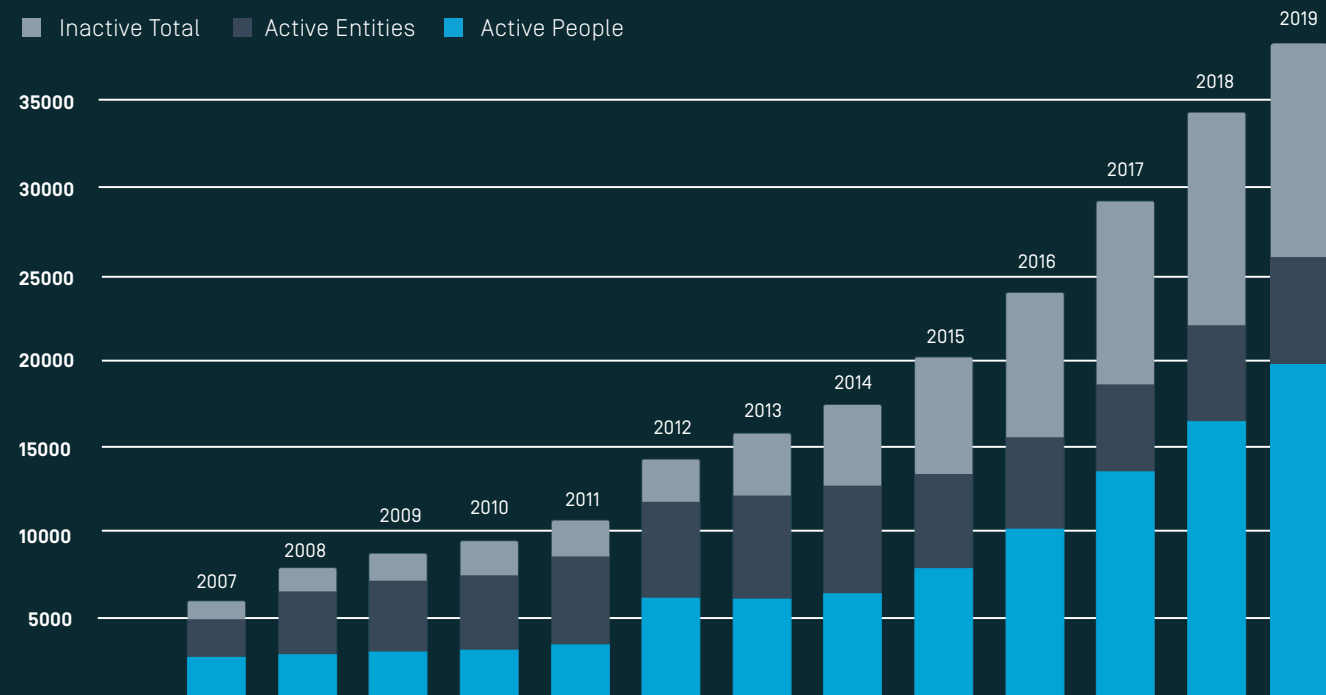
CONTINUOUS IMPROVEMENT

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**	**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**	**Vessels** **Sanctions** **Sanctions Control & Ownership** **Dual-Use Goods** **Specialist Lists**
DELIVERY & APPLICATIONS	**For onboarding and ongoing monitoring:** Data feed, APIs | Online tool: RiskCenter | Financial Crime | Installed system or SaaS: Advanced Adverse Media Screening | Adverse Media Screening **For investigations and enhanced due diligence:** Online tool: RiskCenter | Financial Crime **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 | Sports Risk Intelligence | Custom Research			
SERVICES	Training & Insight Services | Managed Services | Professional Services			

NOTABLE PRODUCT ENHANCEMENTS

Adverse Media

In today's rapidly evolving media landscape, the need to monitor customers/third parties against adverse news is becoming more critical. Several regulatory bodies are issuing guidance recommending the use of verifiable adverse media screening during the customer due diligence processes. To this end, we have launched a full suite of offerings to help companies screen and monitor for adverse media across third-parties in addition to screening against the Dow Jones Risk Database:

- Online tools
- Access to adverse media via APIs or Feeds
- Next generation solution to conduct real-time, automated screening and monitoring by applying artificial intelligence and machine learning on a large volume of names. This solution comes with an option to host the entire application on-premise.

Sanctions Insight Newsletter

Our weekly newsletter provides an overview of regulatory actions from key regulators and jurisdictions. The newsletter contains expert commentary, regulatory updates information (with links to regulators' decisions/alerts), and news straight from Dow Jones Factiva.

RiskCenter Financial Crime

In 2020 we launched a new product with a modern look and feel to perform due diligence against our high quality Risk & Compliance database.
In addition to researching our Watchlist, State-Owned Companies and Adverse Media data sets, this new product includes access to Ultimate Beneficial Ownership visualization, Marijuana-Related Businesses and Money Services Businesses. Customers also have the option to turn on an audit trail or use the product with zero footprint.

Training Center

Risk & Compliance Training Center helps our customers deliver required compliance training to staff and third parties, and to demonstrate to external stakeholders (including regulators, shareholders and others) that they have the appropriate compliance training programs in place.

Training Center consists of online courses allowing compliance and risk managers to educate staff and ensure a sound understanding of compliance risks. Our offerings are designed for three audiences: general employees, specialists with a focus on risk, and third parties.

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 content and products via a quarterly Product Update. A link to the Update is emailed to clients and also is available on the Support area of RiskCenter, along with an archive of previous Updates, available in nine languages. Additional monthly Product Updates are provided as needed.

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