

**Best Practices Guide for Implementation of Targeted Financial Sanctions
Related to Proliferation Financing**

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- I. Section 12A of The Weapons of Mass Destruction and their Delivery Systems (Prohibition of Unlawful Activities Act, 2005 (hereinafter referred to as “The Act”) reads as under:

“12A (1.) No person shall finance any activity which is prohibited under this Act, or under the United Nations (Security Council) Act, 1947 (43 of 1947) or any other relevant Act for the time being in force, or by an order issued under any such Act, in relation to weapons of mass destruction and their delivery systems.

(2) For prevention of financing by any person of any activity which is prohibited under this Act, or under the United Nations (Security Council) Act, 1947 (43 of 1947) or any other relevant Act for the time being in force, or by an order issued under any such Act, in relation to weapons of mass destruction and their delivery systems, the Central Government shall have power to—

(a) freeze, seize or attach funds or other financial assets or economic resources—

(i) owned or controlled, wholly or jointly, directly or indirectly, by such person; or

(ii) held by or on behalf of, or at the direction of, such person; or

(iii) derived or generated from the funds or other assets owned or controlled, directly or indirectly, by such person;

(b) prohibit any person from making funds, financial assets or economic resources or related services available for the benefit of persons related to any activity which is prohibited under this Act, or under the United Nations (Security Council) Act, 1947 (43 of 1947) or any other relevant Act for the time being in force, or by an order issued under any such Act, in relation to weapons of mass destruction and their delivery systems.

(3) The Central Government may exercise its powers under this section through any authority who has been assigned the power under sub-section (1) of Section 7.]

- II. Further, vide Department of Revenue Notification (F. No. P-12011/14/2022-ES Cell-DOR) dated January 30, 2023, Director, FIU-INDIA has been assigned powers under section 12A of the Act, as the Central Nodal Officer.

Introduction

1. Background

1.1 The present document shall be referred to as the 'Best Practices Guide for Implementation of Targeted Financial Sanctions Related to Proliferation Financing (hereinafter referred to as "The Guide") for the purpose of implementation of section 12A of the Weapons of Mass Destruction and Delivery Systems (Prohibition of Unlawful Activities) Act, 2005 (hereinafter referred to as the "WMDA") and rules/notifications issued thereunder.

2. Methodology

In order to identify best practices in respect of implementation of targeted financial sanctions, FIU-INDIA conducted extensive outreach with reporting entities belonging to various sectors (scheduled commercial banks, cooperative banks, NBFCs, payment aggregators, prepaid payment instrument providers, insurance providers, capital market intermediaries, FFMCS, MTSS agents, service providers of virtual digital assets etc) to obtain a general understanding of the systems implemented by said REs for the purpose of implementation of targeted financial sanctions. Further, a questionnaire was developed for seeking specific details of the process. A working group of five reporting entities (spanning various sectors – banking, payment aggregators, prepaid payment instrument providers, service providers of virtual digital assets) was also constituted for detailed consultation. The present guidance document has been compiled, based on the outcome of the outreach, the feedback received in the response to the questionnaires, and the consultation with the working group, to assist the reporting entities to align their sanction screening programmes with the industry-wide best practices identified in the present document to facilitate effective implementation of targeted financial sanctions related to proliferation financing.

3. Best Practices

The methodology described in para 2 above facilitated identification of the various steps which are deemed essential for effective implementation of targeted financial sanctions. The steps and the best practices associated with them are elaborated on in the following paragraphs.

3.1. Step I - Identification of Relevant Sanctions List based on Regulatory Requirements

The first step in effective implementation of sanctions screening regime is the identification of the relevant Sanctions Lists which are required to be implemented by the REs basis relevant legal provisions. In respect of proliferation financing, hyperlinks to the designated lists of persons/entities sanctioned under United Nations Security Council Resolutions 1718 (2006) (pertaining to DPRK) and 2231(2015) (pertaining to Iran) have been provided on the FIU-INDIA portal for ready reference.

3.2. Step II - Ingestion of Designated Lists into the Sanction Screening Systems – Manual vs. Automated

The designated lists can be ingested into the sanction screening systems in three different ways - manual, non-API based ingestion and API-based ingestion. The advantages and disadvantages related to the three methods may be found discussed below.

3.2.1. Manual Ingestion

Manual ingestion entails manual monitoring of the designated lists daily for changes. In the event of any change detected, the entire lists as they appear on UNSC websites are ingested through into the sanction screening system. The manual ingestion-based systems are prone to multiple deficiencies. Manual checks for changes in the designated lists are susceptible to human errors. Further, once changes have been detected in the lists, screening for the entire lists taken from the UNSC websites, instead of screening only for the changes in the lists (also known as the delta), leads to re-generation of alerts in respect of previously closed false positives, resulting in duplication of work. As such, manual monitoring for changes in designated lists and manual ingestion of entire designated lists after such changes are detected, lead to deficient and inefficient sanction screening processes, which should be avoided.

3.2.2. Non-API Based Ingestion

Structured sanctions lists/data feeds (generally obtained from third party service providers, which update, de-duplicate and streamline the sanctions lists and provide the same in an .RTF/ .XML file), are ingested by the REs into the matching engines at designated time of the day to enable scanning on a daily basis. As data feeds are updated automatically, they are not susceptible to human errors in detection of the

changes to designated lists. Structured data feeds can offer enhanced capabilities through cross-referencing with proprietary databases of adverse media references, politically-exposed persons lists, beneficial ownership data etc.

3.2.3. API-Based Ingestion

Structured sanctions lists/data feeds (generally obtained from third party service providers, which update, de-duplicate and streamline the sanctions lists and provide the same in an .RTF/ .XML file), directly interface with the matching engine of the RE through an API. Apart from the other advantages offered by structured data feeds discussed in para 3.2.2 above, the direct interfacing also allows ingestion of changes/updates to the main lists, as well as other lists on real-time basis (as opposed to ingestion at designated time in non-API based systems discussed in para 3.2.2 above), further reducing the delay in screening for changes.

3.3. Step III – Selection of Matching Logic: Exact Matching vs. Fuzzy Logic

The designated lists contain the names of the sanctioned persons/entities, as well as additional fields, such as date of birth, place of birth, nationality, associated entities, aliases etc. The additional fields and the names may be susceptible to regional linguistic variations, phonetic changes, uses of abbreviations, formats of dates and spelling errors etc. As such, the effectiveness of the matching engine is contingent on the matching criteria deployed. Primarily, matching can be implemented with two methods – exact matching and fuzzy logic-based matching. The advantages/disadvantages associated with the two methods are discussed in the following paragraphs.

3.3.1. Exact Match

In this method, the matching engine searches for exact matches between the data on the sanctions lists and the relevant identifiers pertaining to customers. Exact matching logic is more suited for data fields which are structured and hence amenable to exact matches. When dealing with unstructured data fields, as in the case of designated lists issued under UNSC Resolutions, exact match algorithms are likely to miss potential matches with data fields which exhibit regional, linguistic, phonetic variations, alternative date formats and spelling errors.

3.3.2. Fuzzy Logic-Based Matching

Fuzzy matching algorithms consider variations in data fields to account for common misspellings, different name orders, phonetic similarities, regional variations etc. They compute matching scores based on the extent of match and potential matches are determined/identified by setting thresholds on the matching scores so computed (discussed in para 3.3.3 below). As the designated lists provided under UNSC Resolutions also contain unstructured data fields, fuzzy logic-based matching algorithms are more suited for matching engines dealing with such data, compared to the exact matching logic, as discussed in para 3.3.1 above. At the same time, fuzzy logic based algorithms entail institution of detailed standard operating procedures for resolution of potential matches into true matches and false positives, as discussed in para 3.5 below, through effective due diligence process and extensive training of personnel handling the task.

3.3.3. Methodology for Setting Matching Score Thresholds in Fuzzy Logic Based Matching -

The following factors are crucial to process of setting of matching score thresholds for identifying potential matches by REs.

A. Acceptable Number of False Positives

Ordinarily, lower thresholds set on matching scores are likely to generate larger number of alerts. The resolution of alerts into true matches/false positives is a resource (human and technology) intensive process. However, the availability of resources should not be the only factor influencing the process of selecting match score thresholds.

B. Employment of Test Data for Determining Matching Score Thresholds

More scientific methods for setting match score thresholds employ test data sets. The performance of the matching algorithm is gauged at different thresholds to determine the trade-off between generation of false positives and the possibility of missing true matches, to find a balance that aligns with the regulatory requirements and risk pertaining to proliferation financing. The process for setting thresholds should be repeated periodically to ascertain its effectiveness and accuracy.

The REs should adopt a judicious mixture of the two factors – availability of resources and scientific method for setting of thresholds – to ensure a balanced process of sanction screening.

3.3.4. Weight-Based Matching Scores

As the designated lists include multiple data fields in respect of every entry, such as name, aliases, date of birth, nationality, associated entities, designation etc, matching algorithms assign different weights to different data fields when computing the match scores. The weights may be determined based on the amenability of the specific data field for exact matching (date of birth, passport number) and its susceptibility to misspelling, regional variations, phonetic variations etc and its relative importance. REs should employ scientific methods for setting of weights with the help of test data sets, with periodic revision to ensure effectiveness and accuracy.

3.4. Step IV – Process of Sanctions Screening - Four Essential Stages

Subsequent to the ingestion of the lists into the screening systems, the screening should be undertaken in four, mutually-exclusive, stages, which are deemed essential to an effective sanctions screening system. The stages are described below,

3.4.1. Screening of Prospective Customers at the Time of On-boarding:

In order to preclude the possibility of designated persons/entities being accepted as new customers, sanctions screening shall be undertaken at the time of on-boarding.

3.4.2. Daily Screening of Changes in KYC Details of Existing Customers:

Customer KYC data may undergo alteration on account of various reasons, such as periodic KYC, changes in status, enhanced due diligence etc. As such, daily changes in KYC (also known as the delta) shall be screened against designated lists.

3.4.3. Screening of Entire Database for Changes in Designated Lists

Designated lists are altered by the sanctioning bodies from time to time. Any alterations to the lists shall be screened against the entire customer databases of the REs.

3.4.4. Counterparty Screening for Cross-Border Transactions:

REs facilitating cross-border transactions shall undertake screening of the counterparties to such transactions against the designated lists.

3.5. Step V - Resolution of System-Generated Alerts and Disposal

When the customer database interfaces with the sanctions lists/data feeds, the matching engine of the RE generates alerts based on the varied matching criteria and rules explained above. These alerts should be resolved through a multi-level investigation mechanism, which allows detailed human intervention and review and entails adequate training to undertake the requisite tasks. The resolution of alerts may result in three distinct scenarios detailed below,

3.5.1. True Matches

A true match occurs when the KYC data of a prospective/ existing customer matches beyond doubt with the data on the sanctions list. True matches on more than two variables, such as a full name, address/ location, nationality, date of birth, aliases, etc., may be conclusive in determination of a “True Match” beyond doubt. In case of a ‘True Match’ beyond doubt, appropriate action as mandated under the DoR notification issued under section 12A of the WMD Act, 2005 (F. No. P-12011/14/2022-ES Cell-DOR dated January 30, 2023) is required to be undertaken.

3.5.2. False Positives

False positives are essentially false alarms, which can occur due to poor data quality, unstructured data fields, misspellings, commonly occurring names, lack of unique identification data, poor matching criteria setting etc. The quantum of false positives generated reflects the efficiency of the system, and imposes burden of resolution on the compliance teams.

The complete information in the possible match should be compared with all of the information available in account opening form/ transaction statements and match should be ascertained based on True / False matching of primary identifiers (such as Identity number, DOB, Gender etc.), which are amenable to exact match and secondary identifiers (such as place of birth, city, nationality etc.). In the event of mismatch of multiple unique variables which are amenable to precision, such as passport number, date of birth etc, the case can be resolved as a false positive.

3.5.3. Insufficient Information/ Request for Information

In scenarios where the available information is insufficient to conclusively determine whether an alert is a ‘True match’ or ‘False positive’, the REs shall initiate Request for Information, which should trigger enhanced due diligence (EDD) procedure. Based on

additional information obtained through EDD, the alert can be classified as a 'True Match' or a 'False Positive'.

The process of resolution into true match and false positives shall be undertaken through a multi-level resolution mechanism described below, which is an illustration of a two-level mechanism.

3.5.4. Level 1 Investigations

- i. **Inspection of Alerts** - The alerts shall be inspected through examination, comparison of data points, and other additional information, if available.
- ii. **Match of Unique Variables** – Matches on more than two variables, such as a full name, address/ location, nationality, date of birth, aliases, etc., may be conclusive in determination of "True Match". In the event of mismatch of multiple unique variables which are amenable to precision, such as passport number, date of birth etc, the potential match can be resolved into a false positive.
- iii. **Documentation of Findings** - The investigation findings shall be documented in the prescribed format.
- iv. **Escalation to Level 2 or Closure of Alerts** - In the event of classification of an alert as a match or in the event of insufficient information the alert can be escalated to Level 2 for further review. The basis for closure of alerts as a false positive shall be recorded for the purpose of internal audit/review.

3.5.5. Level 2 Investigations

At Level 2, the reviewer shall undertake in-depth research using media reports, official lists/watch lists, government portals, and the internet to gather more information about the alert subject. In case of insufficient information of probable match scenario, enhanced due diligence may be initiated, as discussed in para 3.5.3 above.

3.6. Step VI - Periodic Review of Fuzzy Matching Logic Thresholds and Weights

In order to ensure that the sanctions screening regime implemented by the REs stay current with the evolving sanctions landscape, it is essential that the fuzzy-matching logic, matching score thresholds, assigned weights and corresponding decision logic are reviewed and updated periodically.

4. Conclusion

The effectiveness of a sanctions screening system is contingent on two critical factors, viz, an effective sanctions screening utility/tool and adequately-trained human resources. Best practices which contribute to the effectiveness of a sanction screening utility are reiterated below,

- i. Automated detection of changes to designated lists for triggering screening process reduces susceptibility to human error and prevents duplication of work
- ii. Structured data feeds offer enhanced capabilities through cross-referencing with adverse media references, politically-exposed persons lists, beneficial ownership data etc
- iii. API-based interfacing of lists with matching algorithm allows real-time updates in lists, compared to non-API based interfacing, which allows updates at designated time.
- iv. Fuzzy logic matching is more effective in dealing with spelling errors in KYC data, phonetic, regional, linguistic variations, use of abbreviations in data fields etc
- v. Selection of weights allocated to different data fields for computation of match score and selection of thresholds applied to match scores should be undertaken with a judicious mixture of the two factors – availability of resources and scientific methods for setting of thresholds – to ensure a balanced process of sanction screening.
- vi. Four essential stages of sanction screening include,
 - a. Screening of prospective customers at the time of on-boarding
 - b. Daily screening of changes in customer KYC data
 - c. Screening of changes to designated lists against entire customer database
 - d. Screening of counterparties in cross-border transactions
- vii. Multi-level inspection mechanism for resolution of alerts into true matches and false positives
- viii. Matching score thresholds, weights and decision logic should be reviewed on periodic basis