Canada Deposit Insurance Corporation

# Guidelines for Anonymizing NBDR Data Elements

Version 1.1                                      April 2022

# Guidelines for Anonymizing an NBDR Data Extract

**This document specifies the data elements in the Nominee Broker Data Requirements ("NBDR") which a Nominee Broker ("NB") is required to "mask" should CDIC request a de-identified data extract. A de-identified data extract should be submitted to CDIC through the established process as set out in the NBDR, or as otherwise instructed by CDIC.**

### Masking NBDR Data

Where an NB receives a request from CDIC to provide a de-identified data extract, the NB must be capable of masking certain data elements (fields).

To mask data:
- The values of the masked field must be replaced with anonymous values, not related or connected to the values it replaced;
- The masking value should comply with the Field Format requirements;
- Option #1: the masked value does not have to be unique but the masked value should have the same character string length as the original unmasked value (e.g., "CDIC" can be masked as "U59J" in one instance and "3FDW" in another instance); or
- Option #2: the masked value should be deterministic (i.e., a single raw value is always replaced by the same masked value) for any given field but should not have the same character string length as the original unmasked value (e.g., "CDIC" can be masked as "UJ89LP4J" but if repeated in the same field, must be masked identically).

For greater clarity, masking refers to *substituting* original data with modified data. It is not acceptable to:
- Delete original data (i.e., change original data to null/void/blank);
- Use default values to mask data (e.g., "XXX" or "999"), unless instructed otherwise;
- Insert data into a field that was originally null/void/blank (i.e., where no data previously existed); and
- Mask data (or altering, in any way, from original) in fields that are not included in the *Masked Fields* table (see below).

### Masked Fields

| Data Element | Requirement | Field Format |
|---|---|---|
| Entity Name | Mask the data | VARCHAR |
| First Name | Mask the data | VARCHAR |
| Middle Name | Mask the data | VARCHAR |
| Last Name | Mask the data | VARCHAR |
| Address Line 1 | Mask the data | VARCHAR |
| Address Line 2 | Mask the data | VARCHAR |
| City | Mask the data | VARCHAR |
| Postal Code | Mask the data | VARCHAR |

**Examples**

The following tables provide examples of how an NB might mask the required data elements in an original NBDR extract to produce a "de-identified" data extract.

1) *Option 1: Masking the data of an Individual*

<table>
<tr><td colspan="2" align="center"><b>Original Extract Values:</b></td><td colspan="2" align="center"><b>Masked Extract Values</b></td></tr>
<tr><td><b>Data Element</b></td><td><b>Entry</b></td><td><b>Data Element</b></td><td><b>Entry</b></td></tr>
<tr><td>Data Extract Date</td><td>2022-04-30</td><td>Data Extract Date</td><td>2022-04-30</td></tr>
<tr><td>Total Clients</td><td>100</td><td>Total Clients</td><td>100</td></tr>
<tr><td>Total Arrangements</td><td>INT</td><td>Total Arrangements</td><td>INT</td></tr>
<tr><td>Unique Client Identifier</td><td>CIF321642</td><td>Unique Client Identifier</td><td>CIF321642</td></tr>
<tr><td>Entity Name</td><td></td><td>Entity Name</td><td></td></tr>
<tr><td>First Name</td><td>JOHN</td><td>First Name</td><td>NEUF</td></tr>
<tr><td>Middle Name</td><td>MICHAEL</td><td>Middle Name</td><td>KDEMFHC</td></tr>
<tr><td>Last Name</td><td>DOE</td><td>Last Name</td><td>VOL</td></tr>
<tr><td>Address Line 1</td><td>1234 PORTAGE AVE</td><td>Address Line 1</td><td>3X4W U6YF3RG 9AQ</td></tr>
<tr><td>Address Line 2</td><td></td><td>Address Line 2</td><td></td></tr>
<tr><td>City</td><td>WINNIPEG</td><td>City</td><td>F4LS5W1J</td></tr>
<tr><td>Province</td><td>MB</td><td>Province</td><td>MB</td></tr>
<tr><td>Postal Code</td><td>R3G 0R3</td><td>Postal Code</td><td>8TJ 48T</td></tr>
<tr><td>Country</td><td>CANADA</td><td>Country</td><td>CANADA</td></tr>
<tr><td>MI ID Code</td><td>MIID</td><td>MI ID Code</td><td>MIID</td></tr>
<tr><td>Legal Entity Identifier</td><td>ABCD765987XYZ3210123</td><td>Legal Entity Identifier</td><td>ABCD765987XYZ3210123</td></tr>
<tr><td>SIA Type Code</td><td>4</td><td>SIA Type Code</td><td>4</td></tr>
</table>

2) *Option 2: Masking the Data of an Entity*

<table>
<tr><td colspan="2" align="center"><b>Original Extract Values:</b></td><td colspan="2" align="center"><b>Masked Extract Values</b></td></tr>
<tr><td><b>Data Element</b></td><td><b>Entry</b></td><td><b>Data Element</b></td><td><b>Entry</b></td></tr>
<tr><td>Data Extract Date</td><td>2022-04-30</td><td>Data Extract Date</td><td>2022-04-30</td></tr>
<tr><td>Total Clients</td><td>100</td><td>Total Clients</td><td>100</td></tr>
<tr><td>Total Arrangements</td><td>175</td><td>Total Arrangements</td><td>175</td></tr>
<tr><td>Unique Client Identifier</td><td>CIF521374</td><td>Unique Client Identifier</td><td>CIF521374</td></tr>
<tr><td>Entity Name</td><td>Canada Corp. 123</td><td>Entity Name</td><td>K9B253P7DWYUIGF4</td></tr>
<tr><td>First Name</td><td></td><td>First Name</td><td></td></tr>
<tr><td>Middle Name</td><td></td><td>Middle Name</td><td></td></tr>
<tr><td>Last Name</td><td></td><td>Last Name</td><td></td></tr>
<tr><td>Address Line 1</td><td>1234 Main St</td><td>Address Line 1</td><td>7LA6G54 DE2T7TG 86UGJ</td></tr>
<tr><td>Address Line 2</td><td></td><td>Address Line 2</td><td></td></tr>
<tr><td>City</td><td>OTTAWA</td><td>City</td><td>NRK795674P6</td></tr>
<tr><td>Province</td><td>ON</td><td>Province</td><td>ON</td></tr>
<tr><td>Postal Code</td><td>K2P 6V5</td><td>Postal Code</td><td>29N7YT5TFCUYW</td></tr>
<tr><td>Country</td><td>CANADA</td><td>Country</td><td>CANADA</td></tr>
<tr><td>MI ID Code</td><td>MIID</td><td>MI ID Code</td><td>MIID</td></tr>
<tr><td>Legal Entity Identifier</td><td>ABCD217987JYS2382980</td><td>Legal Entity Identifier</td><td>ABCD217987JYS2382980</td></tr>
<tr><td>SIA Type Code</td><td>4</td><td>SIA Type Code</td><td>4</td></tr>
</table>

Questions concerning this document may be sent via e-mail to CDIC at: Brokers@cdic.ca