



Driver Licence Number Project

Technical information for external stakeholders

Version: 1.0

Status: FINAL

Status date: 05 April 2022

8digitdl@icbc.com





Contents

- 1. Background 3
- 2. Document Purpose..... 3
- 3. Overview of Driver's Licence Number and Client Number 4
 - 3.1 Individuals 4
 - 3.2 Organizations 5
- 4. Number Formats..... 6
 - 4.1 Driver Licence Number Formats..... 6
 - 4.2 Individual Client Number Formats..... 7
 - 4.3 Organisation Client Number 8
- 5. DL Number format usage in ICBC Systems..... 9
- 6. Physical driver's licence..... 10
 - 6.1 Barcode and Magnetic Stripe data..... 10





1. Background

ICBC anticipates running out of seven digit driver's licence numbers by the end of 2023. In preparation, **we will increase the length of driver's licence numbers from 7 digits to 8 digits by the fall of 2023.**

Adding an additional digit to the driver's licence number will impact many ICBC systems and processes. It may also impact your organisation. It is important that you assess your systems and discuss this change with your business and technology teams, so you're prepared to make any changes required to accommodate the additional digit.

If you have any questions about the information in this document you can reach us at 8digitDL@icbc.com.

2. Document Purpose

The purpose of this document is to provide you with technical information to help you assess your systems and processes for impacts related to the introduction of an 8-digit driver licence number.

This document describes:

- what will change when we increase the length of the driver's licence number
- the format of the driver's licence number and the client number
- how these numbers are stored and processed in ICBC systems and applications



3. Overview of Driver's Licence Number and Client Number

Client number (CLN) and driver's licence Number (DLN) are used to uniquely identify customers in ICBC systems. Numbers are assigned when ICBC creates a record for any new (unknown or unmatched) organisation or individual.

- **Individuals** are assigned a **driver's licence number and a client number**.
- **Organisations** are assigned a **client number**.

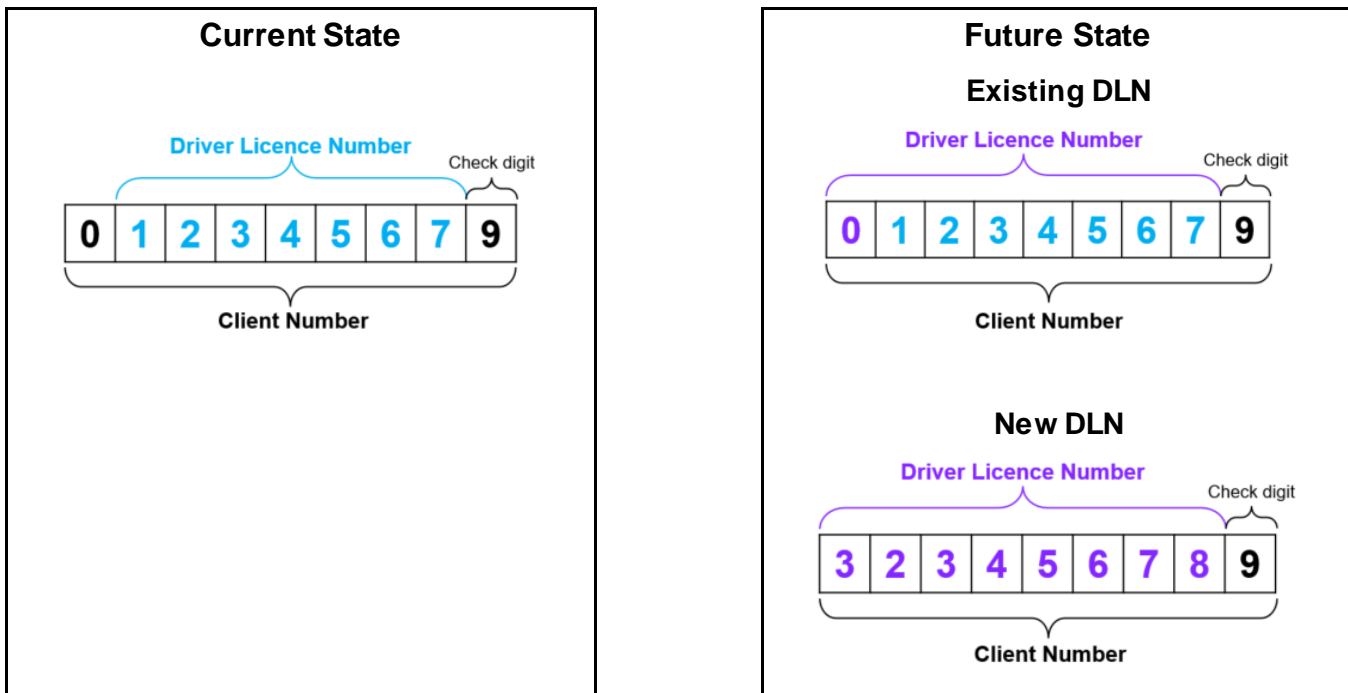
3.1 Individuals

Individuals are assigned a driver's licence number and a client number. The individual client number is derived from the driver's licence number.

In the future:

- the driver's licence number will **increase in length**
- newly issued driver's licence numbers will use a **new number range** (3 or higher)

The diagram below represents current and future states.



Client number and driver licence number field formats vary depending on where they are stored and used in ICBC systems. See [Section 4](#) and [Section 5](#) for field format specifications and specific details of what will change in the future.

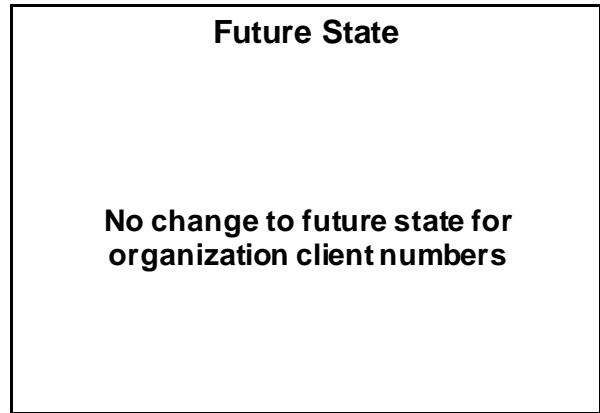
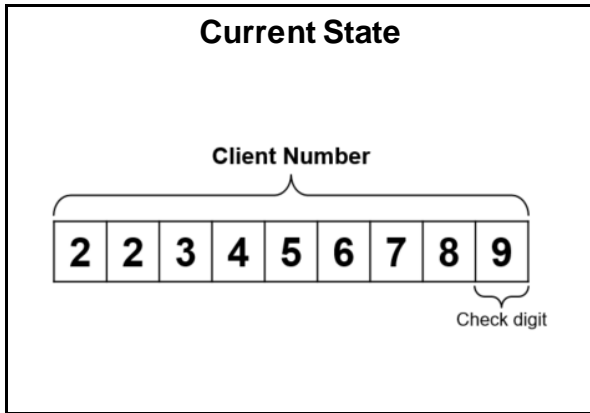


3.2 Organizations

Organizations are assigned a client number. There is no related driver licence number for organizations.

Organization client numbers are assigned from a specific number range and always begin with 2.

There is **no change to future state for organization client numbers**.



4. Number Formats

The following tables define number formats and provide examples of current and future state.

Legend:

1234	Black indicates current state / no change
0000	Blue indicates current state leading zeros
1234	Purple indicates future state change
1234	Red indicates check digit

4.1 Driver Licence Number Formats

Element	Current	Future	Change Summary																																																																				
DL Number Integer Format	Maximum 7-digit integer <table border="1" style="margin-bottom: 10px;"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td></tr> </table> <table border="1" style="margin-bottom: 10px;"> <tr><td>3</td><td>4</td><td>7</td><td>6</td><td>3</td><td>1</td><td></td></tr> </table> <table border="1"> <tr><td>2</td><td>3</td><td>4</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> </table>	1	2	3	4	5	6	7	3	4	7	6	3	1		2	3	4	6	7	8	9	Maximum 8-digit integer <table border="1" style="margin-bottom: 10px;"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td></tr> </table> <table border="1" style="margin-bottom: 10px;"> <tr><td>3</td><td>4</td><td>7</td><td>6</td><td>3</td><td>1</td><td></td><td></td></tr> </table> <table border="1" style="margin-bottom: 10px;"> <tr><td>2</td><td>3</td><td>4</td><td>6</td><td>7</td><td>8</td><td>9</td><td></td></tr> </table> <table border="1"> <tr><td>3</td><td>1</td><td>0</td><td>9</td><td>8</td><td>7</td><td>9</td><td>4</td></tr> </table>	1	2	3	4	5	6	7	8	3	4	7	6	3	1			2	3	4	6	7	8	9		3	1	0	9	8	7	9	4	<ul style="list-style-type: none"> No change to integer format No change to existing DLNs New DLNs will be 8-digits long New DLNs will use new number range, starting with 3 range 															
1	2	3	4	5	6	7																																																																	
3	4	7	6	3	1																																																																		
2	3	4	6	7	8	9																																																																	
1	2	3	4	5	6	7	8																																																																
3	4	7	6	3	1																																																																		
2	3	4	6	7	8	9																																																																	
3	1	0	9	8	7	9	4																																																																
DL Number String Format	7 numeric character string, padded with leading zeros <table border="1" style="margin-bottom: 10px;"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td></tr> </table> <table border="1" style="margin-bottom: 10px;"> <tr><td>0</td><td>0</td><td>5</td><td>6</td><td>7</td><td>4</td><td>5</td></tr> </table> <table border="1" style="margin-bottom: 10px;"> <tr><td>0</td><td>3</td><td>4</td><td>7</td><td>6</td><td>3</td><td>1</td></tr> </table> <table border="1"> <tr><td>2</td><td>3</td><td>4</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> </table>	1	2	3	4	5	6	7	0	0	5	6	7	4	5	0	3	4	7	6	3	1	2	3	4	6	7	8	9	8 numeric character string, padded with leading zeros <table border="1" style="margin-bottom: 10px;"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td></tr> </table> <table border="1" style="margin-bottom: 10px;"> <tr><td>0</td><td>0</td><td>0</td><td>5</td><td>6</td><td>7</td><td>4</td><td>5</td></tr> </table> <table border="1" style="margin-bottom: 10px;"> <tr><td>0</td><td>0</td><td>3</td><td>4</td><td>7</td><td>6</td><td>3</td><td>1</td></tr> </table> <table border="1" style="margin-bottom: 10px;"> <tr><td>0</td><td>2</td><td>3</td><td>4</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> </table> <table border="1"> <tr><td>3</td><td>1</td><td>0</td><td>9</td><td>8</td><td>7</td><td>9</td><td>4</td></tr> </table>	1	2	3	4	5	6	7	8	0	0	0	5	6	7	4	5	0	0	3	4	7	6	3	1	0	2	3	4	6	7	8	9	3	1	0	9	8	7	9	4	<ul style="list-style-type: none"> String length increased to 8 characters Existing DLNs will have additional leading zero added to increase length to 8 characters New DLNs will be 8 characters long
1	2	3	4	5	6	7																																																																	
0	0	5	6	7	4	5																																																																	
0	3	4	7	6	3	1																																																																	
2	3	4	6	7	8	9																																																																	
1	2	3	4	5	6	7	8																																																																
0	0	0	5	6	7	4	5																																																																
0	0	3	4	7	6	3	1																																																																
0	2	3	4	6	7	8	9																																																																
3	1	0	9	8	7	9	4																																																																

4.2 Individual Client Number Formats

Element	Current	Future	Change summary																																																															
Individual Client Number Integer Format	<p>Maximum 8-digit integer</p> <table border="1"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td></tr> <tr><td>3</td><td>4</td><td>7</td><td>6</td><td>3</td><td>1</td><td>3</td><td></td></tr> <tr><td>2</td><td>3</td><td>4</td><td>6</td><td>7</td><td>8</td><td>9</td><td>2</td></tr> </table>	1	2	3	4	5	6	7	8	3	4	7	6	3	1	3		2	3	4	6	7	8	9	2	<p>Maximum 9-digit integer</p> <table border="1"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>3</td><td>4</td><td>7</td><td>6</td><td>3</td><td>1</td><td>3</td><td></td><td></td></tr> <tr><td>2</td><td>3</td><td>4</td><td>6</td><td>7</td><td>8</td><td>9</td><td>2</td><td></td></tr> <tr><td>3</td><td>1</td><td>0</td><td>9</td><td>8</td><td>7</td><td>9</td><td>4</td><td>0</td></tr> </table>	1	2	3	4	5	6	7	8	9	3	4	7	6	3	1	3			2	3	4	6	7	8	9	2		3	1	0	9	8	7	9	4	0	<ul style="list-style-type: none"> No change to integer format No change to existing CLNs New individual CLNs will be 9-digits long 			
1	2	3	4	5	6	7	8																																																											
3	4	7	6	3	1	3																																																												
2	3	4	6	7	8	9	2																																																											
1	2	3	4	5	6	7	8	9																																																										
3	4	7	6	3	1	3																																																												
2	3	4	6	7	8	9	2																																																											
3	1	0	9	8	7	9	4	0																																																										
Individual Client Number String Format	<p>9 numeric character string, padded with leading zeros</p> <table border="1"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>0</td><td>3</td><td>4</td><td>7</td><td>6</td><td>3</td><td>1</td><td>3</td></tr> <tr><td>0</td><td>2</td><td>3</td><td>4</td><td>6</td><td>7</td><td>8</td><td>9</td><td>2</td></tr> </table>	1	2	3	4	5	6	7	8	9	0	0	3	4	7	6	3	1	3	0	2	3	4	6	7	8	9	2	<p>9 numeric character string, padded with leading zeros</p> <table border="1"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>0</td><td>3</td><td>4</td><td>7</td><td>6</td><td>3</td><td>1</td><td>3</td></tr> <tr><td>0</td><td>2</td><td>3</td><td>4</td><td>6</td><td>7</td><td>8</td><td>9</td><td>2</td></tr> <tr><td>3</td><td>1</td><td>0</td><td>9</td><td>8</td><td>7</td><td>9</td><td>4</td><td>0</td></tr> </table>	1	2	3	4	5	6	7	8	9	0	0	3	4	7	6	3	1	3	0	2	3	4	6	7	8	9	2	3	1	0	9	8	7	9	4	0	<ul style="list-style-type: none"> No change to string format No change to existing CLNs New individual CLNs will use new number range, starting with 3
1	2	3	4	5	6	7	8	9																																																										
0	0	3	4	7	6	3	1	3																																																										
0	2	3	4	6	7	8	9	2																																																										
1	2	3	4	5	6	7	8	9																																																										
0	0	3	4	7	6	3	1	3																																																										
0	2	3	4	6	7	8	9	2																																																										
3	1	0	9	8	7	9	4	0																																																										

4.3 Organisation Client Number

Element	Current	Future	Change
Organization Client Number Integer Format	9-digit integer <div style="display: flex; justify-content: space-between; border: 1px solid black; padding: 2px;">1 2 3 4 5 6 7 8 9</div> <div style="display: flex; justify-content: space-between; border: 1px solid black; padding: 2px;">2 1 0 9 8 7 8 4 9</div> <div style="display: flex; justify-content: space-between; border: 1px solid black; padding: 2px;">2 3 7 4 3 7 6 5 8</div>	9-digit integer <div style="display: flex; justify-content: space-between; border: 1px solid black; padding: 2px;">1 2 3 4 5 6 7 8 9</div> <div style="display: flex; justify-content: space-between; border: 1px solid black; padding: 2px;">2 1 0 9 8 7 8 4 9</div> <div style="display: flex; justify-content: space-between; border: 1px solid black; padding: 2px;">2 3 7 4 3 7 6 5 8</div>	<ul style="list-style-type: none"> No change
Organization Client Number String Format	9 numeric character string <div style="display: flex; justify-content: space-between; border: 1px solid black; padding: 2px;">1 2 3 4 5 6 7 8 9</div> <div style="display: flex; justify-content: space-between; border: 1px solid black; padding: 2px;">2 1 0 9 8 7 8 4 9</div> <div style="display: flex; justify-content: space-between; border: 1px solid black; padding: 2px;">2 3 7 4 3 7 6 5 8</div>	9 numeric character string <div style="display: flex; justify-content: space-between; border: 1px solid black; padding: 2px;">1 2 3 4 5 6 7 8 9</div> <div style="display: flex; justify-content: space-between; border: 1px solid black; padding: 2px;">2 1 0 9 8 7 8 4 9</div> <div style="display: flex; justify-content: space-between; border: 1px solid black; padding: 2px;">2 3 7 4 3 7 6 5 8</div>	<ul style="list-style-type: none"> No change

5. DL Number format usage in ICBC Systems

The table below lists ICBC system changes for **driver licence number** only.

No ICBC system changes are required for client number:

- For integer format client number, ICBC systems currently use the data type “integer”. No change is required to support future state.
- For string format client number, ICBC systems currently use the data type “CHAR (9)”. No change is required to support future state.

Exception cases may exist. Please contact us at 8digitdl@icbc.com with questions.

System or Component	Current	Future	Change
IMS DB	Integer format DL number for the field data type “FIXED BIN (31)”	Integer format DL number for the field data type “FIXED BIN (31)”	No
	7 character string format DL number for field data type “CHAR (7)”	8 character string format DL number for field data type “CHAR (8)”	Yes
Z/OS DB2	Integer format DL number for the field data type “INT”	Integer format DL number for the field data type “INT”	No
	7 character string format DL number for field data type “CHAR (7)”	8 character string format DL number for field data type “CHAR (8)”	Yes
Mainframe transactions and programs – input & output data	7 character string format DL number	8 character string format DL number	Yes
Mainframe Application – screen input & display	7 character string format DL number	8 character string format DL number	Yes
Mainframe batch files	7 character string format DL number	8 character string format DL number	Yes

System or Component	Current	Future	Change
Mainframe reports	7 character string format DL number	8 character string format DL number	Yes
Web service or API <i>*please consult ICBC for the DL number format of specific ICBC services or APIs</i>	Integer format DL number	Integer format DL number	No
	7 character string format DL number	8 character string format DL number	Yes

6. Physical driver's licence

After we implement this change, driver's licences in circulation may show either 7- or 8-digit numbers:

- Existing cards will show 7-digits
- Newly issued, renewed or replaced cards will show 8-digits

Driver's licences are generally issued with a 5-year expiry date. Existing cards will be gradually updated to show 8-digit numbers as they are renewed or replaced. After the 5-year renewal cycle most cards will show 8-digits.

6.1 Barcode and Magnetic Stripe data

Data contained in the magnetic stripe and barcode will align with what is printed on the card:

- Existing cards will have 7-digit driver's licence number in magnetic stripe and barcode
- New, renewed or replaced cards will have 8-digit driver's licence number in magnetic stripe and barcode

There is **no change to the technical specification for barcode or magnetic stripe data**. Current data formats for both barcode and magnetic stripe will support future state.

After we implement this change, regardless of what is printed on the card or captured from the barcode or magnetic stripe, integration points with ICBC systems must follow the number formats described in [Section 4](#) and [Section 5](#).

