# Consumer Data Right

## Providing Historical Data as a Data Holder to an Accredited Data Recipient

**3 August 2021**

**V0.3**

EnergyAustralia
*LIGHT THE WAY*

# Executive Summary

## Context

- There is a challenge to the design of CDR in energy regardless of whether the gateway or peer to peer model is used: How to provide Historical Meter Data via the CDR when the customer has not been with the same Retailer for the period of the Data request.
- The customer's current Retailer certainly must authenticate the customer prior to allowing the Meter Data provision via CDR, but how can and should the process work to confirm the customer's identity for past Retailers?
- Customers may switch electricity Retailers one or more times a year, so this could be an issue.

## Scenarios

The following six scenarios have been explored:

1. Customer with same Retailer on same address
2. Customer with Change of Retailer (CoR) on same address
3. Change of customer with same Retailer on same address
4. Change of customer with different Retailer on same address
5. Customer with same Retailer on different address.
6. Customer with different Retailer on different address

In the six scenarios outlined, the Retailer is usually only able to provide Meter Data for the period the customer has been with them (whether this is at one or multiple addresses).

We focus on Scenario 2 where the current Retailer could, in theory, send old Meter Data that relates to the same customer at the same address, for the period when the customer was with a previous Retailer. A solution to this is explored in the Options. Note: AEMO cannot currently distinguish between Scenario 2 and 4, I.e. whether the customer and Retailer have changed, or only the Retailer has changed.

## Possible options:

1. ADR requests multiple Retailers for their relevant data sets. Customer will indicate their Retailers across the period they were at the same address and ADR will 'ping' each Retailer for data.
2. AEMO to record customer movement in MSATS, but not the customer details. AEMO will route request for Historical Meter Data to previous Retailer(s) to process.
3. AEMO to record customer movement in MSATS, and allow current Retailer to send requested Historical Meter Data belonging to previous Retailer(s), where customer consents.
4. Limit Meter Data to the current Retailer only. No historical Meter Data will be permitted to be sent via CDR.

Options 1, 2 and 3 are alternatives to each other. Option 4 is the default approach. The Options presented require further work to determine if they are viable and what is preferred, considering:

- Cost benefit
- Complexity/Efficiency
- User experience
- Interactions with other reforms e.g. Reducing customer switching times
- Options 2 and 3 should be subject to a Privacy risk assessment

# Problem statement and background

## Problem Statement:

We have two problems to solve:

- With the Peer-to-Peer model, an ADR will request on behalf of a customer Meter Data from the Energy Retailer (Data Holder).  The Retailer only has data for the period the customer has an account with the Retailer. Where a customer changes their Retailer, technically the Retailer has no right/access to the data prior to the change.  Additionally, the Retailer does not know how long the customer has been at the address previously.

- There are different options to solve for this, although all are less than perfect….

## Background:

- Peer-to-Peer model
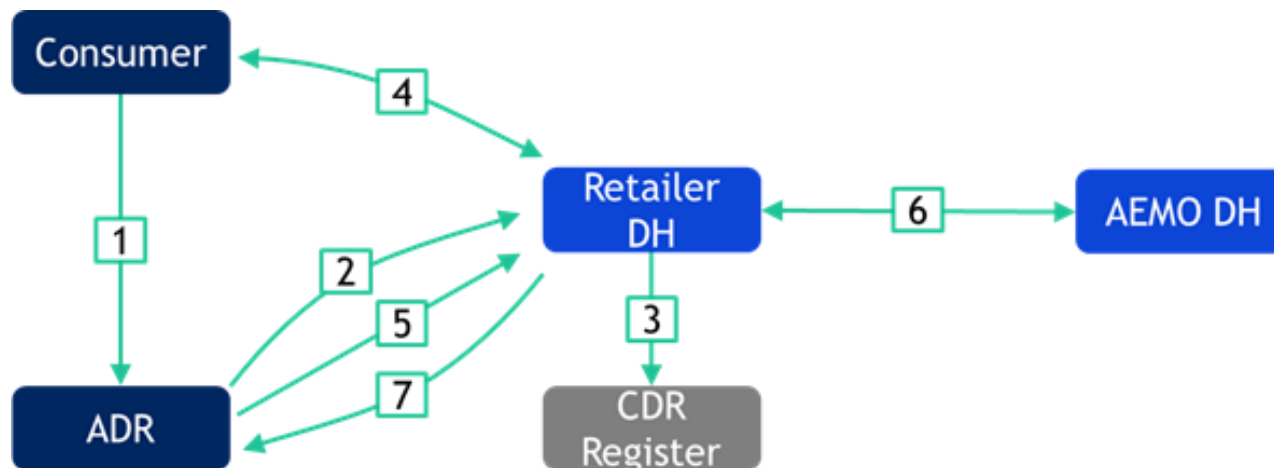
# Data Holder - Data Sets

| Dataset | Data Holder | | | Contain Historical Data in response to ADR |
|---|---|---|---|---|
| | AEMO | AER / VIC Energy Compare | Retailers | |
| **NMI Standing data** | ✓ | | | ✗ [1] |
| Connection point information | | | | |
| **Customer provided data** | | | | ✗ |
| Name of account holder, contact details including billing address/postal address, information provided on customer appliances. | | | ✓ | |
| **Metering data** | ✓ | | | ✓ |
| Data collected by Meter Data providers or otherwise estimated or substituted by Meter Data Providers | | | | |
| **Billing data** | | | | ✗ [2] |
| Historical billing information for each connection point to which electricity is delivered. | | | ✓ | |
| **Product data – Generic Tariff** | | | | ✗ |
| Retail tariffs, usage charges, applicable discounts for the supply of electricity to all consumers and products | | ✓ | | |
| **Product data – Tailored Tariff** | | | | ✗ [3] |
| Retail tariffs, usage charges, applicable discounts for the supply of electricity to all consumers and products tailored to a specific consumer. | | | ✓ | |
| **Distributed Energy Resource Register** | ✓ | | | ✗ |
| Register of DER technology installed at a residential consumer's premises | | | | |

[1] Assumption only current view of NMI
[2] Assumption only bills from current Retailer (no sharing of closed accounts)
[3] Assumption only current product (energy plan)

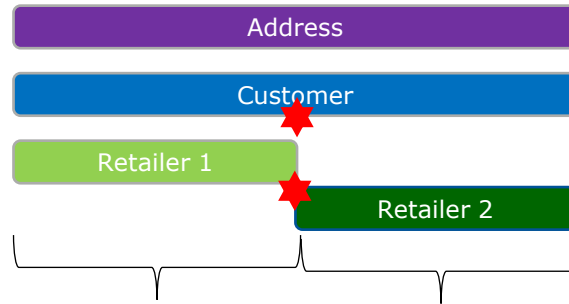*Only Data Set to solve for is Metering Data*

# Scenarios Identified
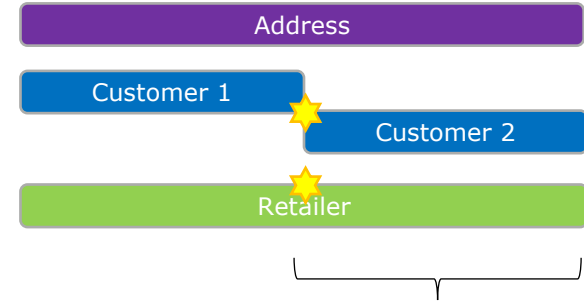
**(1) Customer with same Retailer on same address**

| Address |
| Customer |
| Retailer |
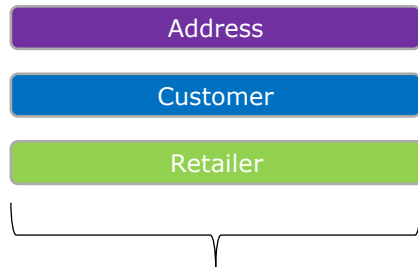
Data to be shared for Customer with ADR

**(2) Customer with CoR on same address**

| Address |
| Customer |
| Retailer 1 |
| Retailer 2 |

Data to be shared for Customer with ADR?

**(3) Change of Customer with same Retailer on same address**
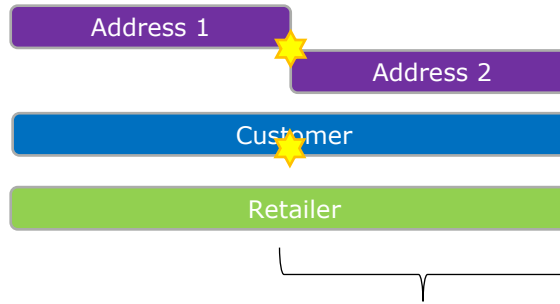
| Address |
| Customer 1 |
| Customer 2 |
| Retailer |

Data to be shared for Customer with ADR

**(4) Change of Customer with different Retailer on same address**

| Address |
| Customer 1 |
| Customer 2 |
| Retailer 1 |
| Retailer 2 |
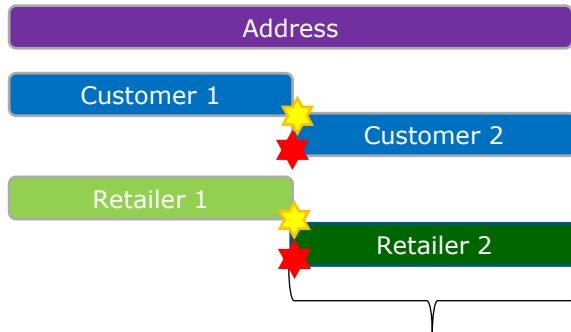
Data to be shared for Customer with ADR

**(5) Customer with same Retailer on different address**

| Address 1 |
| Address 2 |
| Customer |
| Retailer |

Data to be shared for Customer with ADR

**(6) Customer with different Retailer on different address**

| Address 1 |
| Address 2 |
| Customer |
| Retailer 1 |
| Retailer 2 |
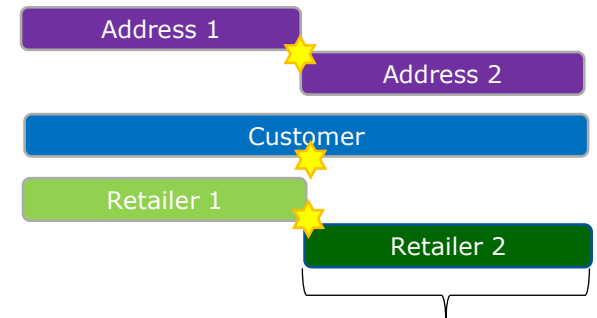
Data to be shared for Customer with ADR

⭐ Move Out/In

⭐ Change of Retailer

# Scenario 1: Customer with same Retailer on same address

| Address |
|---|

| Customer |
|---|

| Retailer |
|---|

Data to be shared for
Customer with ADR

MSATS view:

| Address |
|---|
| Retailer |
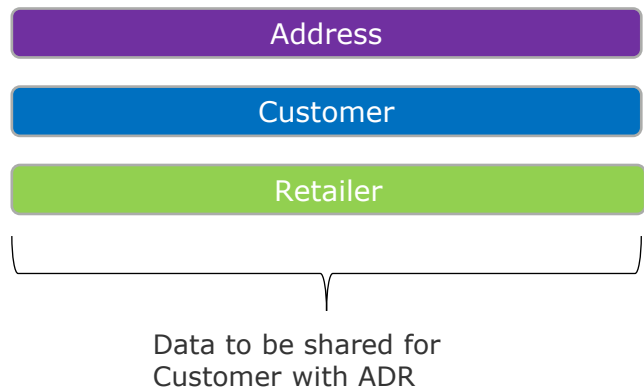
Retailer view:

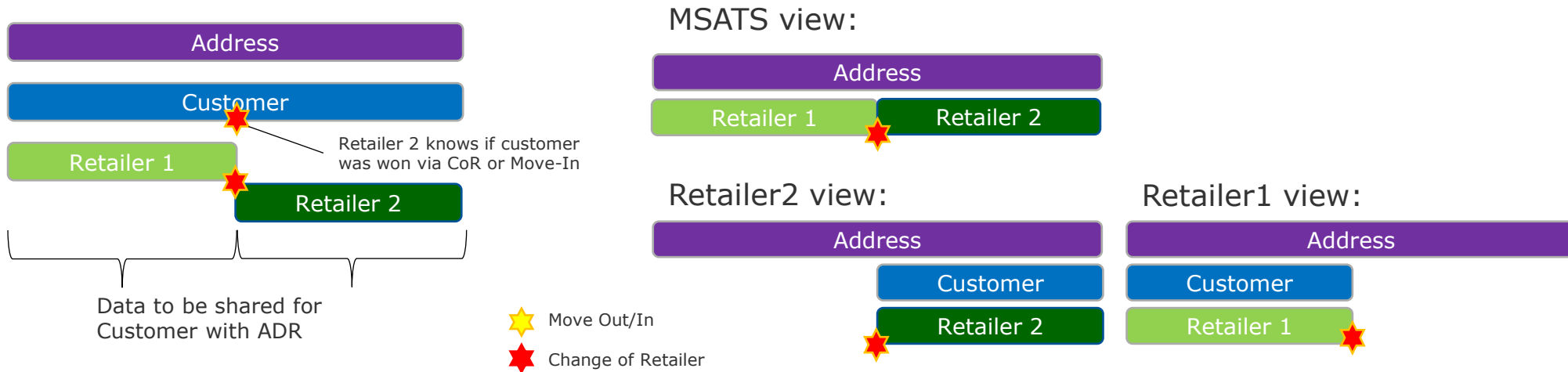| Address |
|---|
| Customer |
| Retailer |

**Remarks:**
- Retailer has relationship with customer on address, AEMO can check in MSATS FRMP (Retailer) and provide all Meter Data.
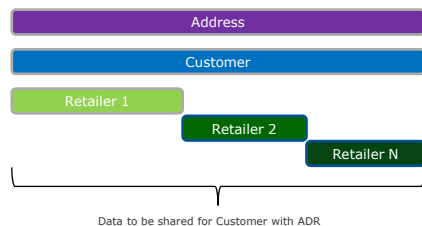- AEMO cannot tell if it's the same customer, all it knows is that it's the same Retailer.


☞ No issue, Retailer can provide historical data for the customer

# Scenario 2: Customer with Change of Retailer on same address

| Address |
|---|

| Customer |
|---|

Retailer 2 knows if customer was won via CoR or Move-In

| Retailer 1 |
|---|

| Retailer 2 |
|---|

Data to be shared for Customer with ADR

MSATS view:

| Address |
|---|

| Retailer 1 | Retailer 2 |
|---|---|

Retailer2 view:

| Address |
|---|

| Customer |
|---|

| Retailer 2 |
|---|

Retailer1 view:

| Address |
|---|

| Customer |
|---|

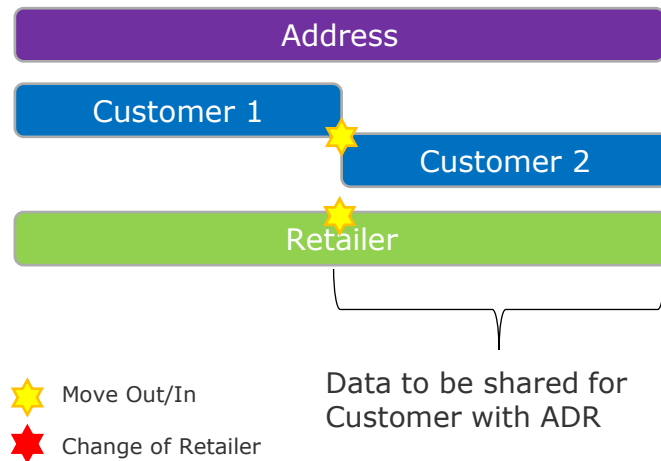| Retailer 1 |
|---|

⭐ Move Out/In

★ Change of Retailer

**Remarks**
- Retailer 2 knows that customer was on the address prior as it records a Change of Retailer (not a Move-In).
- Retailer 2 has relationship with customer, but is not able to provide all Meter Data for the full requested period where data relates to the previous Retailer 1.
- In this case the Retailer could request AEMO for a longer period, but technically there needs to be validation that it is the same Customer, and where it was a different customer it raises a privacy issue.
- Is Historical Meter Data a bigger problem if customer changes Retailer more often in the requested period?
  (see diagram below)

| Address |
|---|

| Customer |
|---|

| Retailer 1 |
|---|

| Retailer 2 |
|---|

| Retailer N |
|---|

Data to be shared for Customer with ADR

☞ Issue to resolve

# Scenario 3: Change of Customer with same Retailer on same address

| Address |
|---|

| Customer 1 |
|---|

⭐ | Customer 2 |

⭐ | Retailer |

MSATS view:

| Address |
|---|

| Retailer |
|---|

Retailer view:

| Address |
|---|

| Customer 1 | Customer 2 |
|---|---|

| Retailer |
|---|

⭐ Move Out/In

✴ Change of Retailer
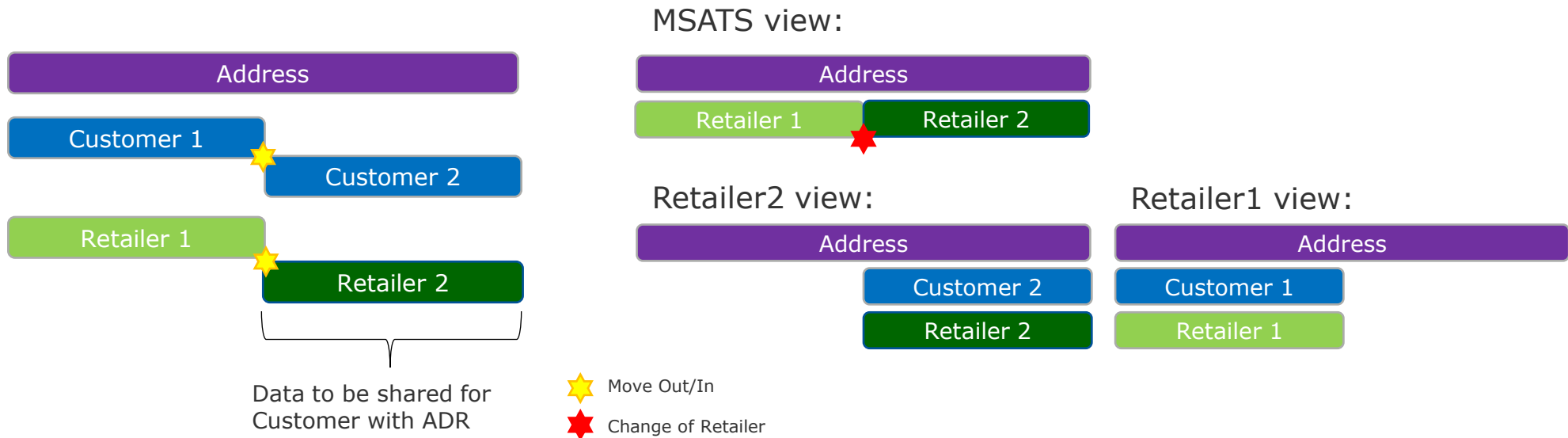
Data to be shared for Customer with ADR

**Remarks**
- Retailer knows that Customer 2 moved in so only data from move-in date is to be provided to ADR.
- AEMO has no knowledge of customer move in or out.

☞ No issue, Retailer can provide historical data for Customer 2

# Scenario 4: Change of Customer with different Retailer on same address

MSATS view:

Address | Customer 1 | Customer 2 | Retailer 1 | Retailer 2

Address | Retailer 1 | Retailer 2

Retailer2 view:

Address | Customer 2 | Retailer 2

Retailer1 view:

Address | Customer 1 | Retailer 1

Data to be shared for Customer with ADR
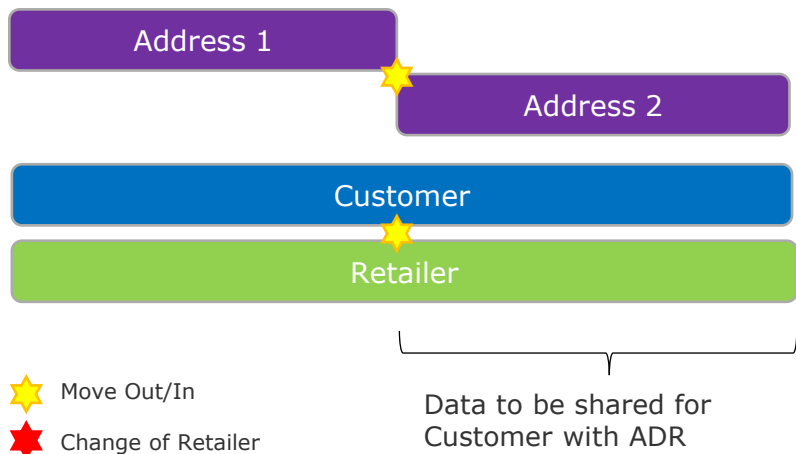
⭐ Move Out/In

✷ Change of Retailer

**Remarks**

- Retailer 2 knows that Customer 2 moved in so only data from move-in date is to be provided to ADR.
- **Note**: AEMO cannot distinguish between Scenario 2 and 4, I.e. whether the customer and Retailer has changed (Scenario 4), or only the Retailer has changed (Scenario 2), but no issue for Scenario 4 as Retailer 2 would only provide Customer 2's data.

☞ No issue, Retailer can provide historical data for Customer 2

# Scenario 5: Customer with same Retailer on different address

| | |
|---|---|
| **Address 1** | |
| | **Address 2** |

**Customer**

**Retailer**

★ Move Out/In

★ Change of Retailer

Data to be shared for Customer with ADR

MSATS view:

| Address 1 | Address 2 |
|---|---|
| Retailer | Retailer |

Retailer view:

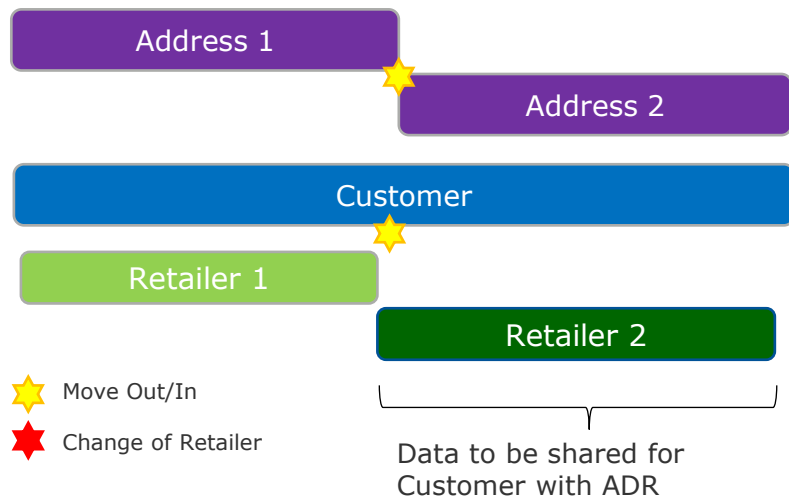| Address 1 | Address 2 |
|---|---|
| Customer | Customer |
| Retailer | Retailer |

**Remarks**

- Retailer knows that Customer moved in to Address 2 so only data from move in date is to be provided to the ADR.
- AEMO has no knowledge of customer move in or out. They are unaware that the same customer is at address 1 and 2.

☞ No issue, Retailer can provide historical data for Address 2

# Scenario 6: Customer with different Retailer on different address

MSATS view:

| Address 1 | | Address 2 |
|---|---|---|
| Retailer | | Retailer |

Retailer view:

| Address 1 | | Address 2 |
|---|---|---|
| Customer | | Customer |
| Retailer | | Retailer |

Address 1

Address 2

Customer

Retailer 1

Retailer 2

⭐ Move Out/In

⭐ Change of Retailer
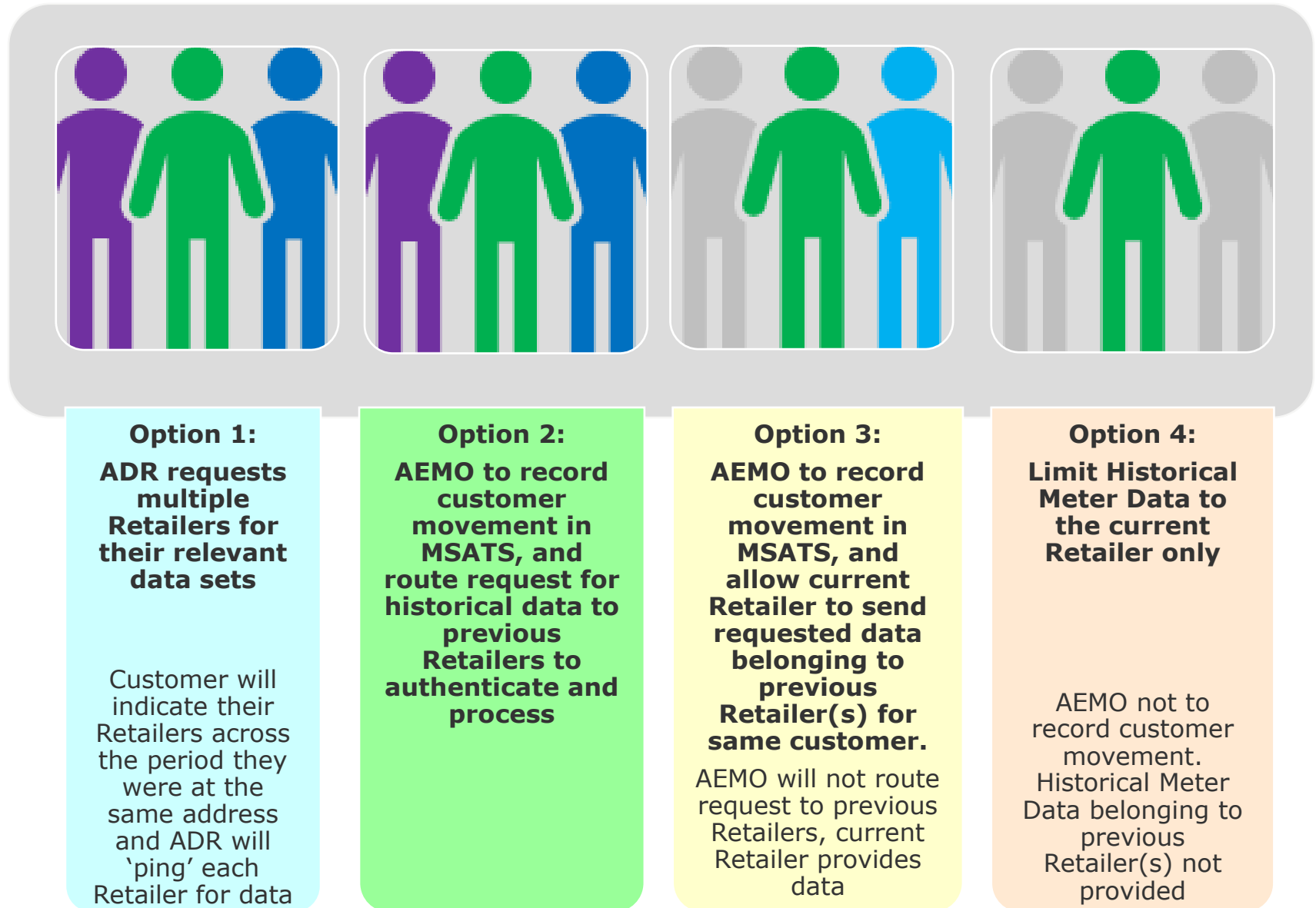
Data to be shared for Customer with ADR

**Remarks**

- Retailer knows that Customer moved into Address 2 so only data from move in date is to be provided to ADR.
- AEMO has no knowledge of customer move in or out.

☞ No issue, Retailer can provide historical data for Address 2

# Solution Options



**Option 1:**

**ADR requests multiple Retailers for their relevant data sets**

Customer will indicate their Retailers across the period they were at the same address and ADR will 'ping' each Retailer for data

**Option 2:**

**AEMO to record customer movement in MSATS, and route request for historical data to previous Retailers to authenticate and process**

**Option 3:**

**AEMO to record customer movement in MSATS, and allow current Retailer to send requested data belonging to previous Retailer(s) for same customer.**

AEMO will not route request to previous Retailers, current Retailer provides data

**Option 4:**

**Limit Historical Meter Data to the current Retailer only**

AEMO not to record customer movement. Historical Meter Data belonging to previous Retailer(s) not provided

# Option 1: Customer provides list of Retailers to ADR and authenticates/authorises with each Retailer to share data with the ADR.
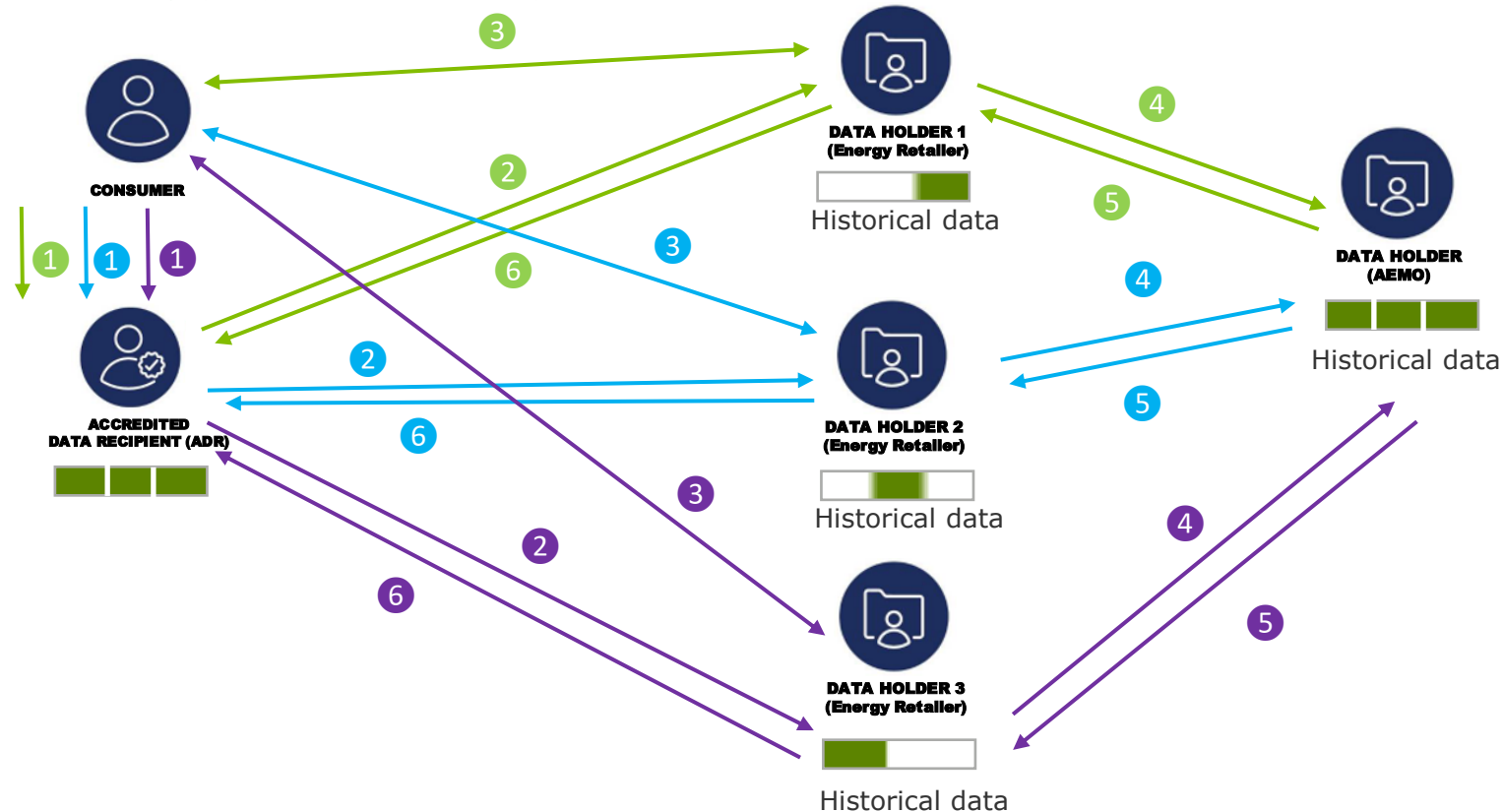


**Pros:**

- No changes to the current CDR model (works for current and previous Retailers) – but requires multiple authentications
- ADR understands what requests are being made and to whom

**Cons:**

- Customer might not recall previous Retailers
- Multiple authentication is very poor from CX perspective
- Customer details for authentication might change
- Previous Retailers may not retain data needed to authenticate
- Previous Retailers may not have data to authenticate in the first place e.g. digital details or identification data

## Option 2: AEMO can identify previous Retailers and then customer authenticates/authorises with each Retailer
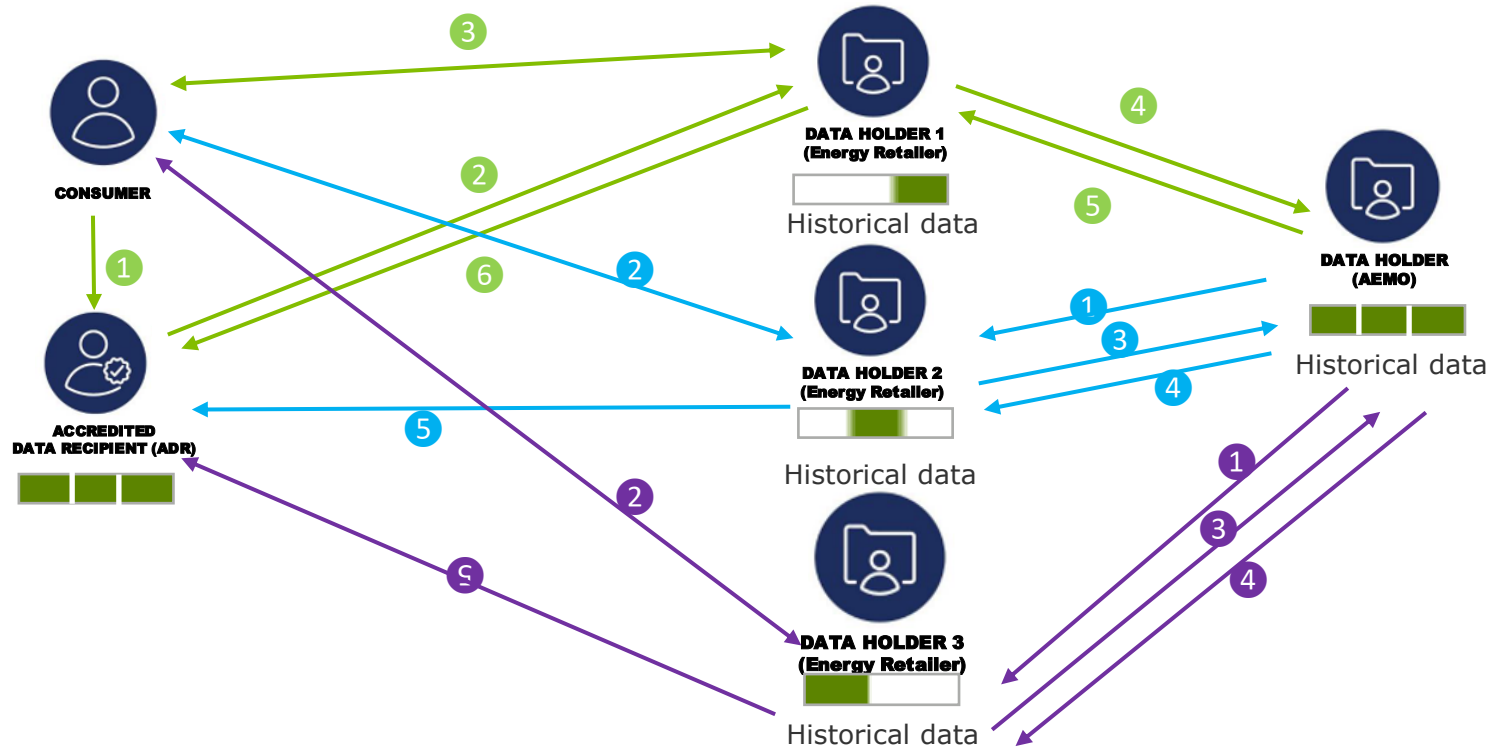


**Remarks:**
- Current Retailer will do authentication and request data from AEMO. AEMO will then push authentication to previous Retailer, if customer was with the previous Retailer *at the same address*.
- Option 2 requires that AEMO obtain information that flags whether there has been a change of customer (or not) when a 'change of Retailer'/'move in' occurs. Retailers might need to collect this information at the point of sale e.g. ask the customer if they were previously the account holder at the address.
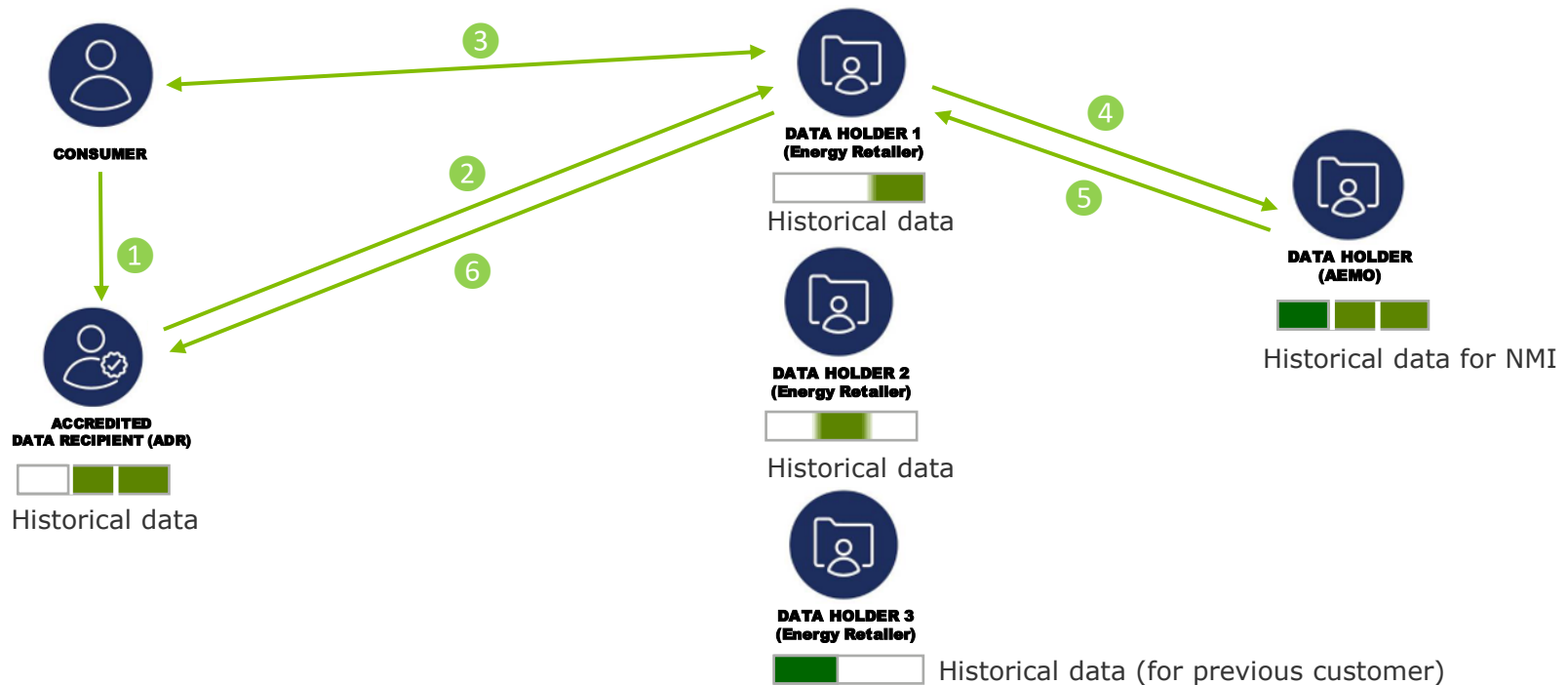
**Pros:**
- Customer only needs to identify their current Retailer.

**Cons:**
- MSATS changes to add new customer movement flag.
- The process to collect the information about change of customer has gaps - issues with CX and how to verify if the information is correct? It could lead to privacy issues if that info is wrong.
- Complex, more interactions with AEMO.
- Same four issues as per Option 1 re multiple authentication and incorrect authentication data.

# Option 3: Current Retailer will provide all Historical Meter Data from AEMO back to the ADR on behalf of the other Retailer(s) for same customer at the same address



**Remarks:**

- Like Option 2, Option 3 requires that AEMO obtain information that flags whether there has been a change of customer or not.
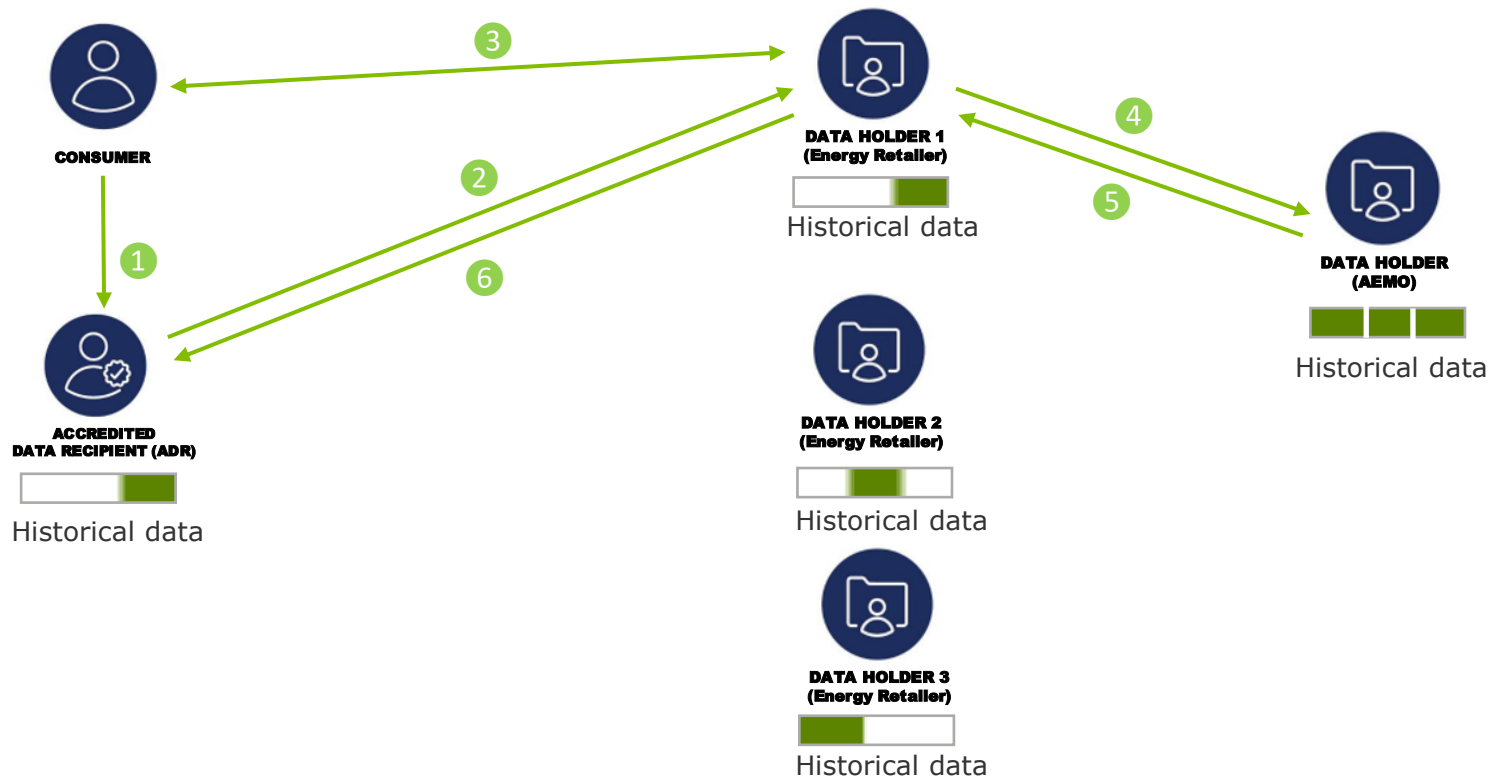
**Pros**

- Customer only interacts with their current Retailer, avoids multiple authentication.

**Cons:**

- Same as Option 2, MSATS changes to add new customer movement flag.
- Same as Option 2, the process to collect the information about change of customer has gaps.
- Same as Option 2, complex, more interactions with AEMO.
- Increased risk of data security breach - The current Retailer is passing meter data from a previous Retailer to an ADR, when the current Retailer would have otherwise never dealt with that data. This is still an issue even if the customer consents, and where Rules protect against the current Retailer misusing the data.

# Option 4: Current Retailer provides only historical data from AEMO for the period the customer is with the current Retailer



**Remarks:**

Option 4 is basically the default position where AEMO has not built the change of customer flag in MSATS yet or assurance cannot be provided that the same customer was the account holder at the address prior to switching to the current Retailer. Therefore, only data with their current Retailer can be provided.

**Pros:**
- Customer only interacts with their current Retailer, avoids multiple authentication.
- No MSATs changes/lowest cost.
- Potential interim solution until Option 3 is assessed more/implemented
- No increased risk of data security breach

**Cons:**
- Only small set of historical data is sent back to ADR (relating to current Retailer)