

Consequences of Customers choosing a new Accredited Party

(One-on-one relationship between Customer and Retailer)

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Meeting #3

1. Introducing the Point-of-Entry
2. Introducing End-to-End Connectivity
3. Scenarios
 - Customer to Retailer relationship
4. Questions
5. Appendix
 - Victorian AMI (provided for reference only)

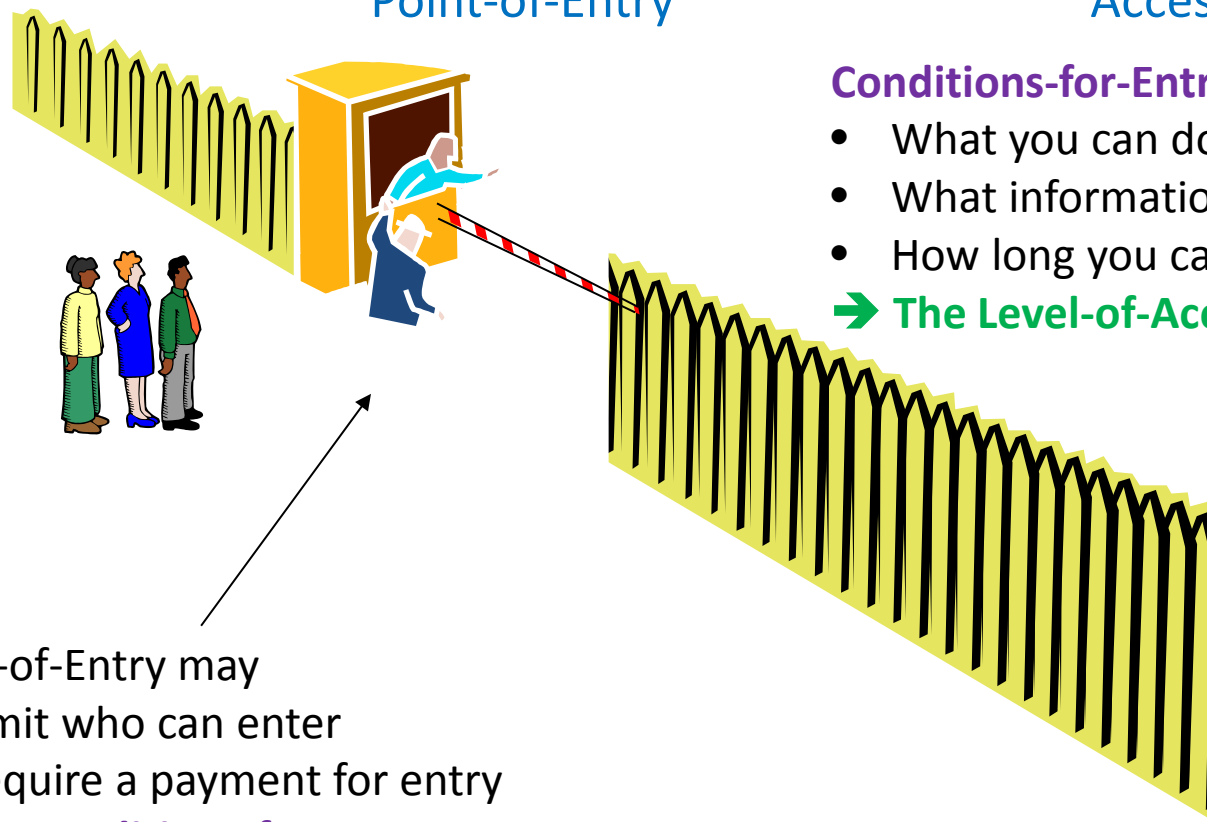
Point-of-Entry

Someone has the right to control
Access at the Point-of-Entry

No Access

Point-of-Entry

Access



Conditions-for-Entry may limit

- What you can do
- What information you can obtain
- How long you can stay

→ **The Level-of-Access**

Point-of-Entry may

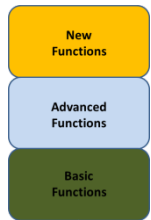
- Limit who can enter
- Require a payment for entry
- **Set Conditions-for-Entry**

System Functionality

Software in the Customer Smart Meter and Accredited Party's Smart Meter Application (SMA) determine the Functionality of the Smart Metering System

Meter Functionality

Customer Smart Meter



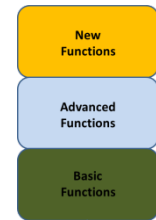
Provided by Software in the Smart Meter

Accredited Party Smart Meter Application



Provided by Software in the Accredited Party's Smart Meter Application

Smart Meter Application Functionality



A Communications Path is required to use the functionality

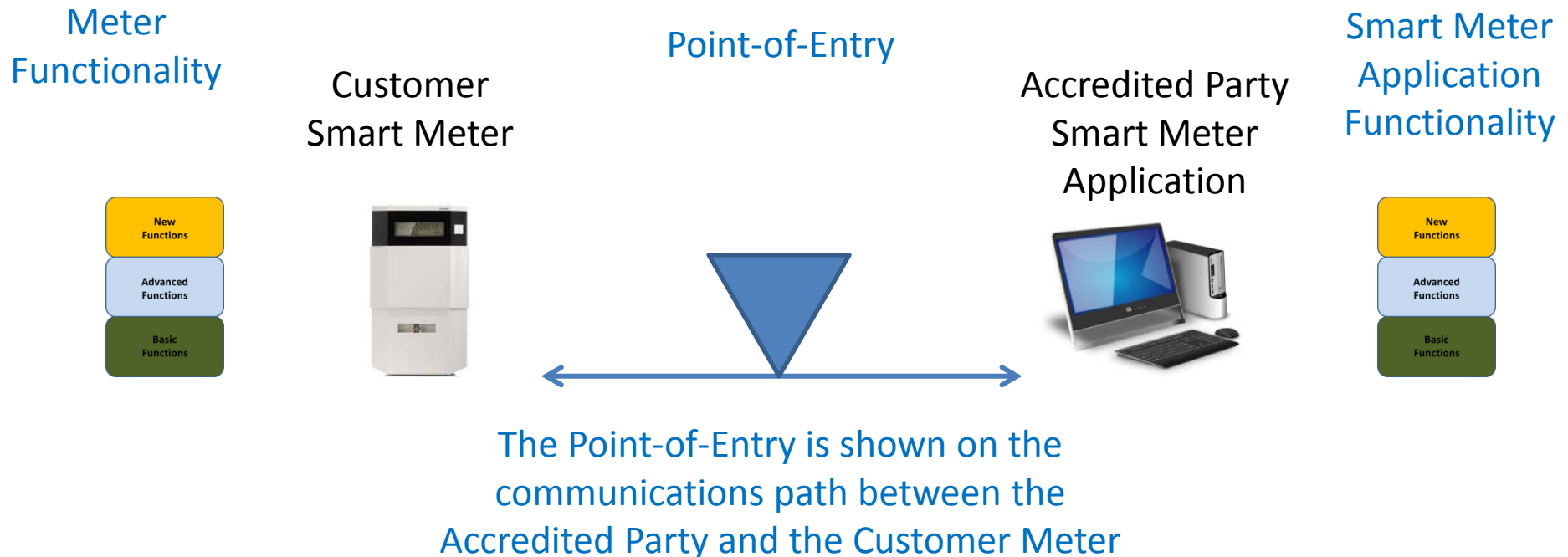
For an Accredited Party to remotely interact with the customer's smart meter they must be able to communicate with the meter



A line depicts the path the Accredited Party uses to communicate with the meter (and the meter communicates with the AP)

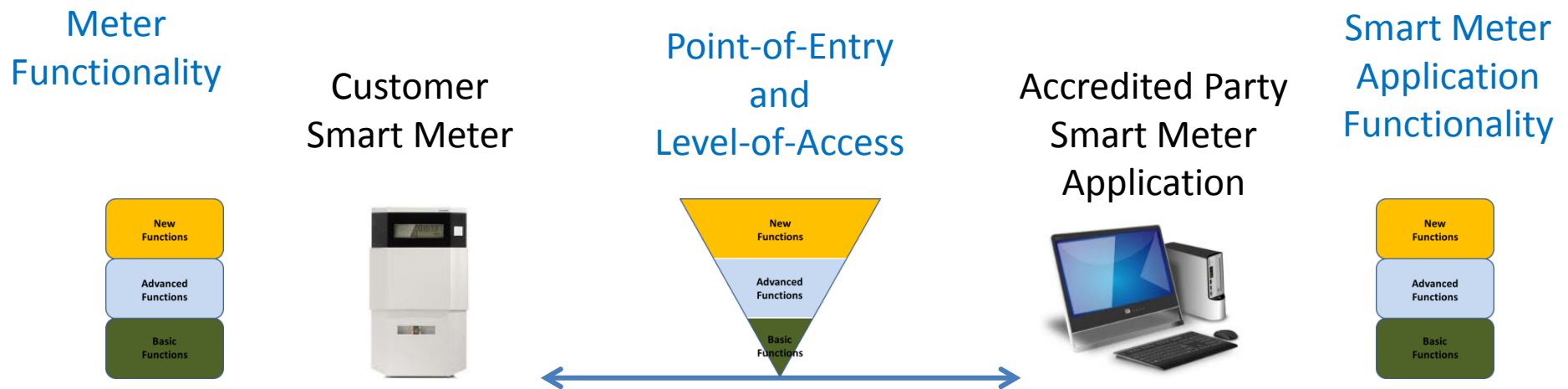
Showing the Point-of-Entry

For Smart Meters we define the Point-of-Entry as the point at which an Accredited Party is provided access to remotely interact with a customer's smart meter



Point-of-Entry and Level-of-Access

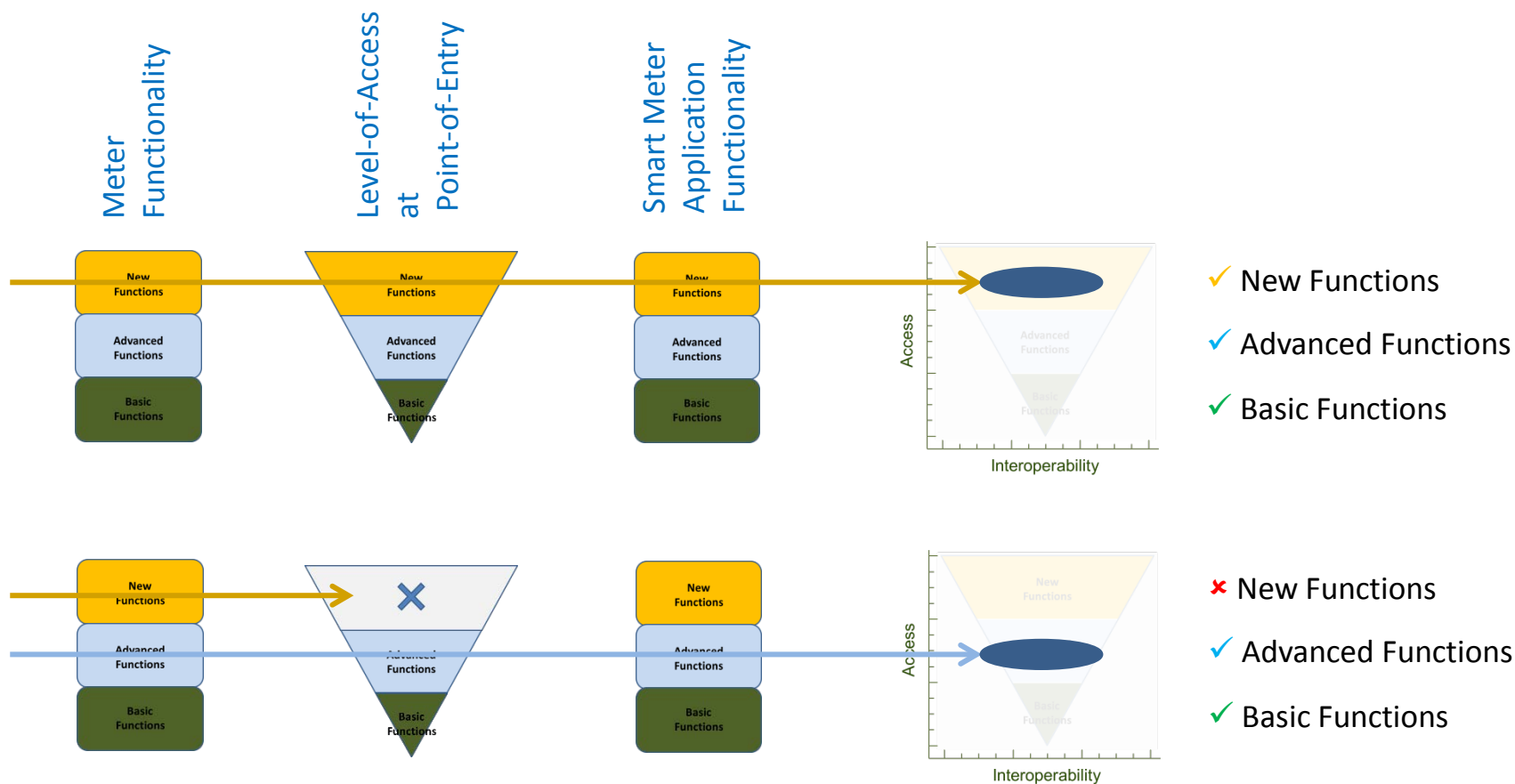
The point-of-entry is where the Accredited Party's use of functionality is restricted. We will refer to this as the Level-of-Access



The Level-of-Access is shown using the "Access Triangle"

End-to-End connection

An End-to-end connection occurs when functionality and level-of-access are aligned

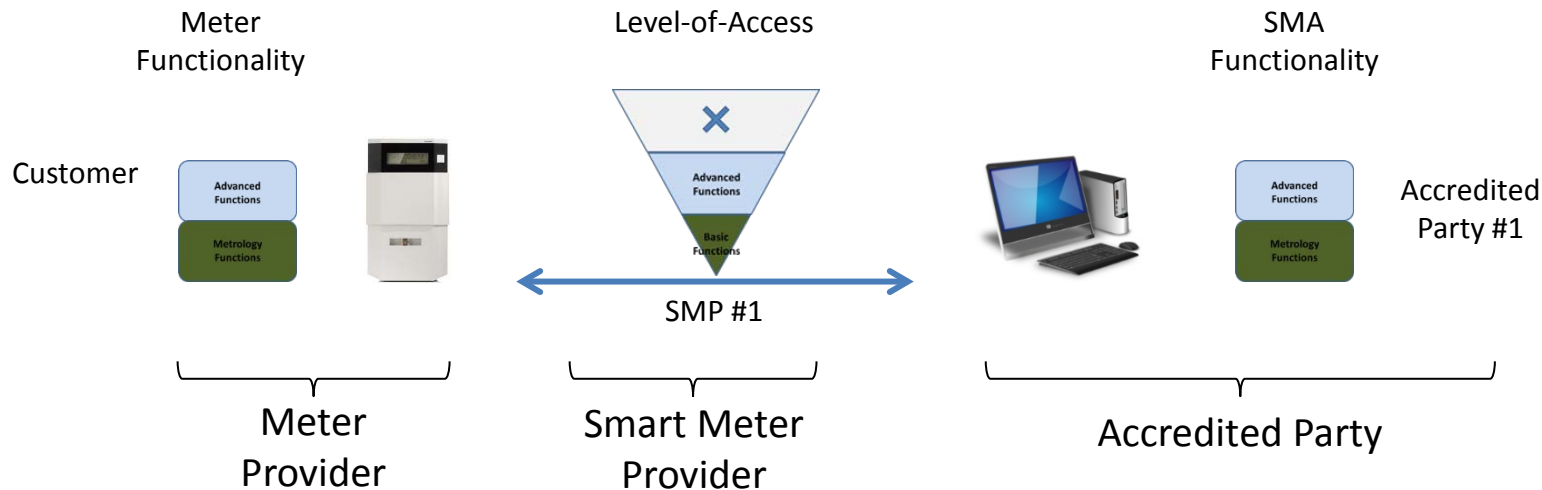


Customers will have relationships with various Accredited Parties

The slides will show

The path the Accredited Party uses to communicate with a customer meter

The Point-of-Entry the Accredited Parties are using



The Smart Meter Provider (SMP) is assumed to manage the Point-of-Entry

[For Meeting 3](#)

Assume that the MP and SMP are separate entities

For the following scenarios

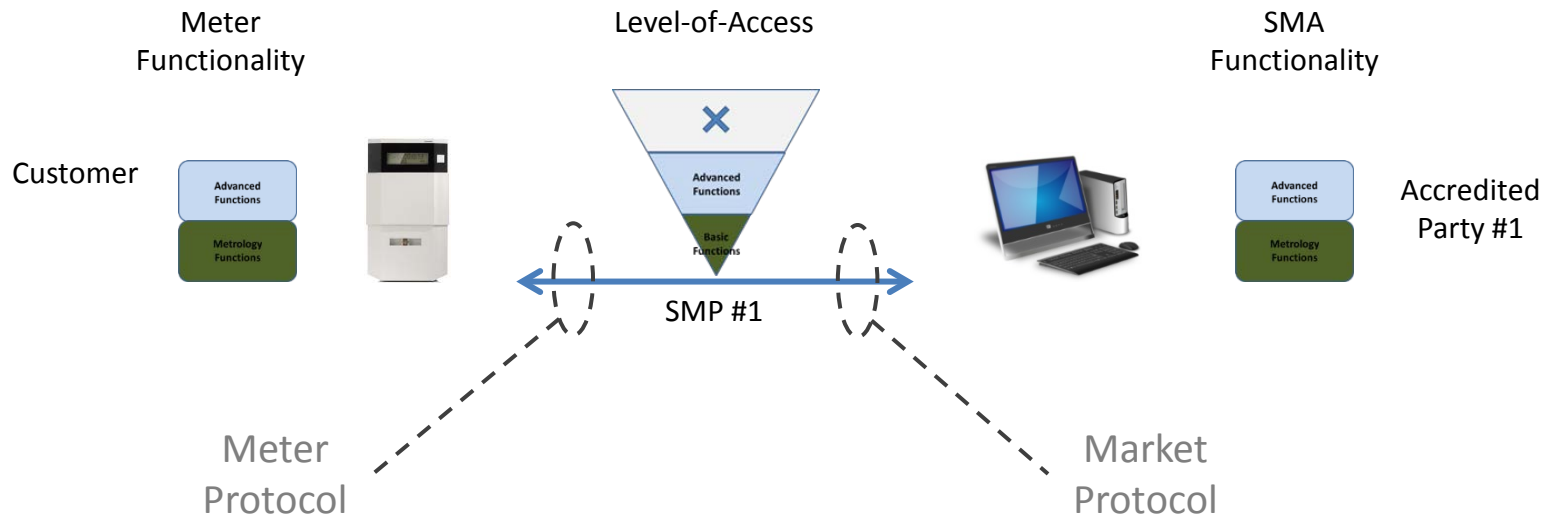
Assume the Accredited Party is the FRMP

Protocols

For this meeting assume

A Meter Protocol is used between the SMP and the meter

A Market Protocol is used between the Accredited Parties and the SMP



It is acknowledged that this assumption suggests the SMP implements a Protocol Translator, however the use of a combined Meter and Market protocol (Common Protocol) is also possible.

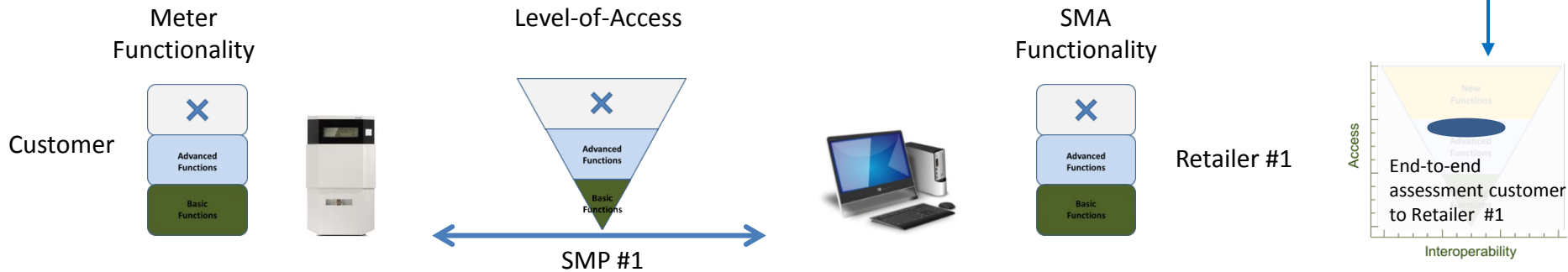
Scenarios

Studying the relationship between
Customers and Retailers

Scenario ZERO – Baseline

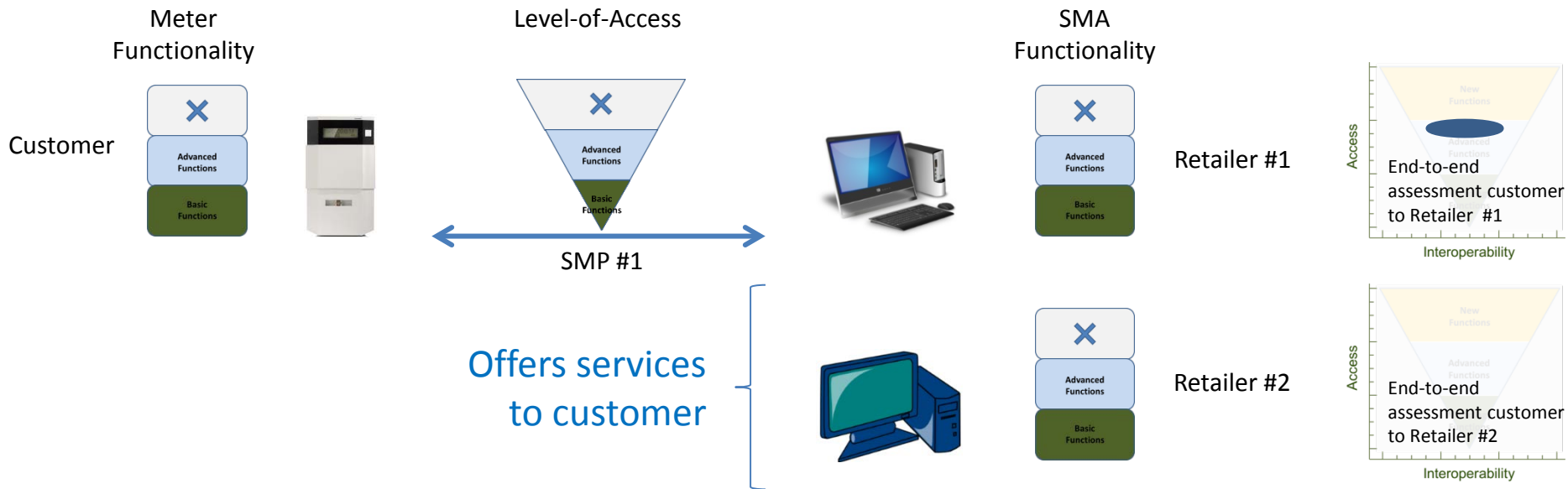
Starting Point

A Customer has established a relationship with Retailer #1, and SMP #1 provides the Point-of-Entry for AP #1 to the Customer



Scenario ZERO – Baseline

There is another Retailer offering services to the Customer



The scenarios suggest Policy Position(s) for discussion

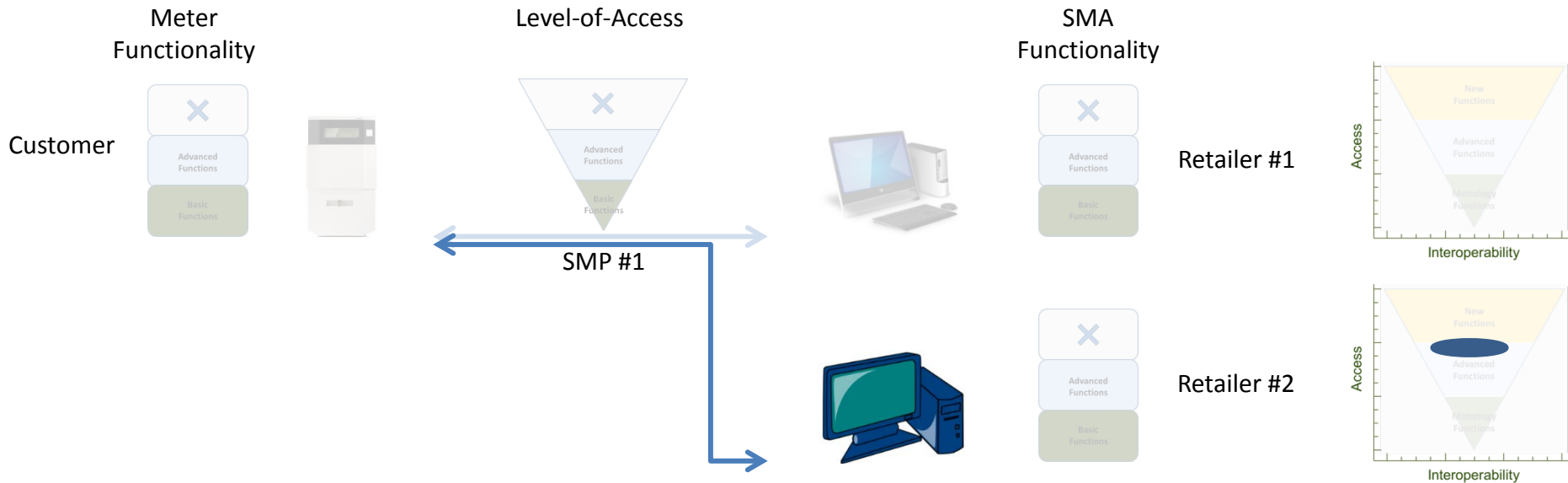
Suggested Policy Position(s) for discussion

Customer chooses Retailer #2

Scenario

Customer chooses to change to Retailer #2

Retailer #2 uses SMP #1 as the Point-of-Entry



Suggested Policy Position for discussion

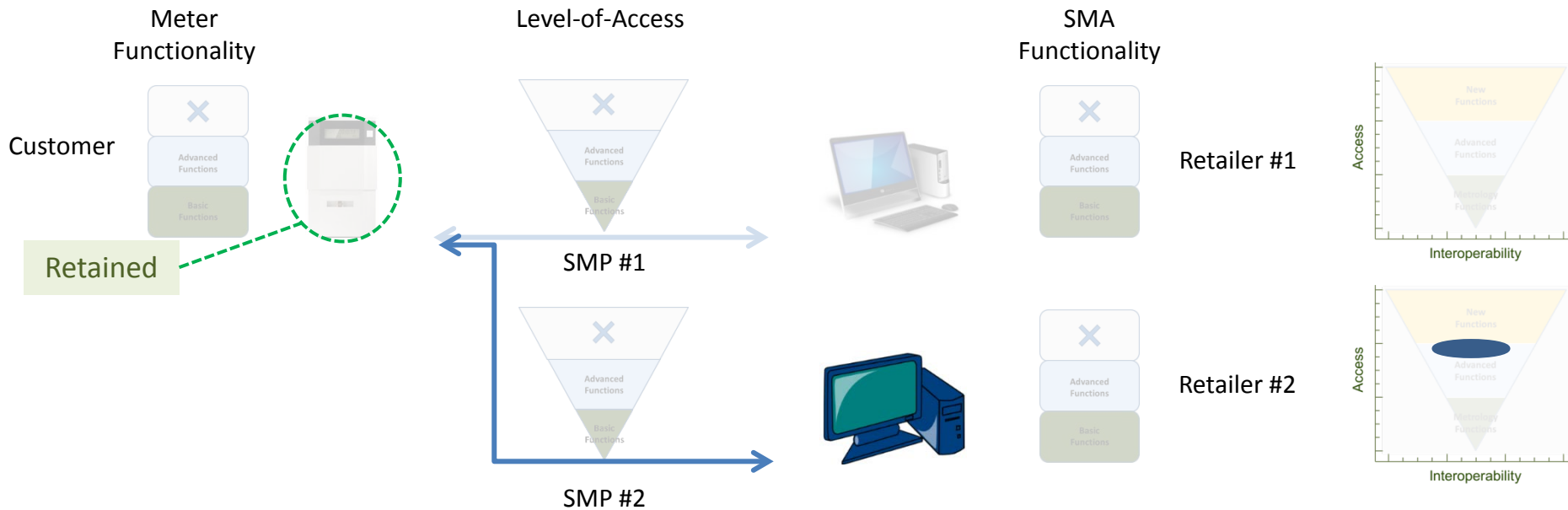
A common market protocol supports efficient switching of Retailers

Customer chooses Retailer #2

Scenario

Customer chooses to change to Retailer #2

Retailer #2 chooses to use SMP #2 as their Point-of-Entry. The meter is retained.



Suggested Policy Position for discussion

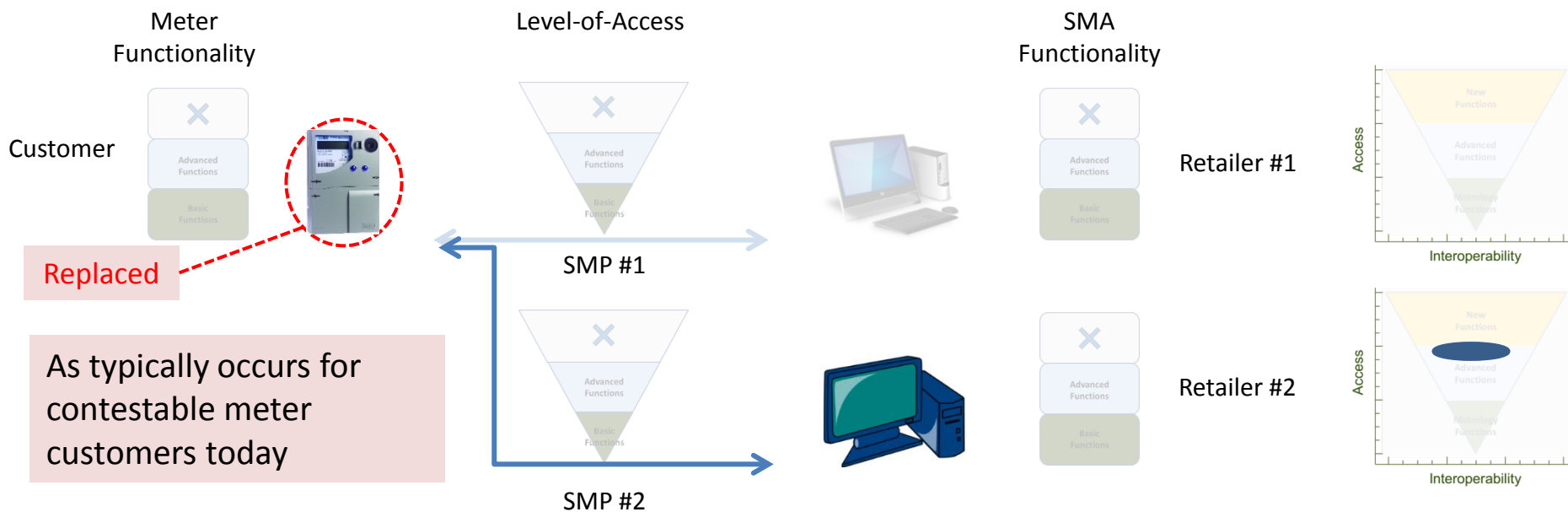
A common meter protocol supports efficient switching of meters between SMPs

Customer chooses Retailer #2

Scenario

Customer chooses to change to Retailer #2

Retailer #2 chooses to use SMP #2 and replace the customer meter



Suggested Policy Position for discussion

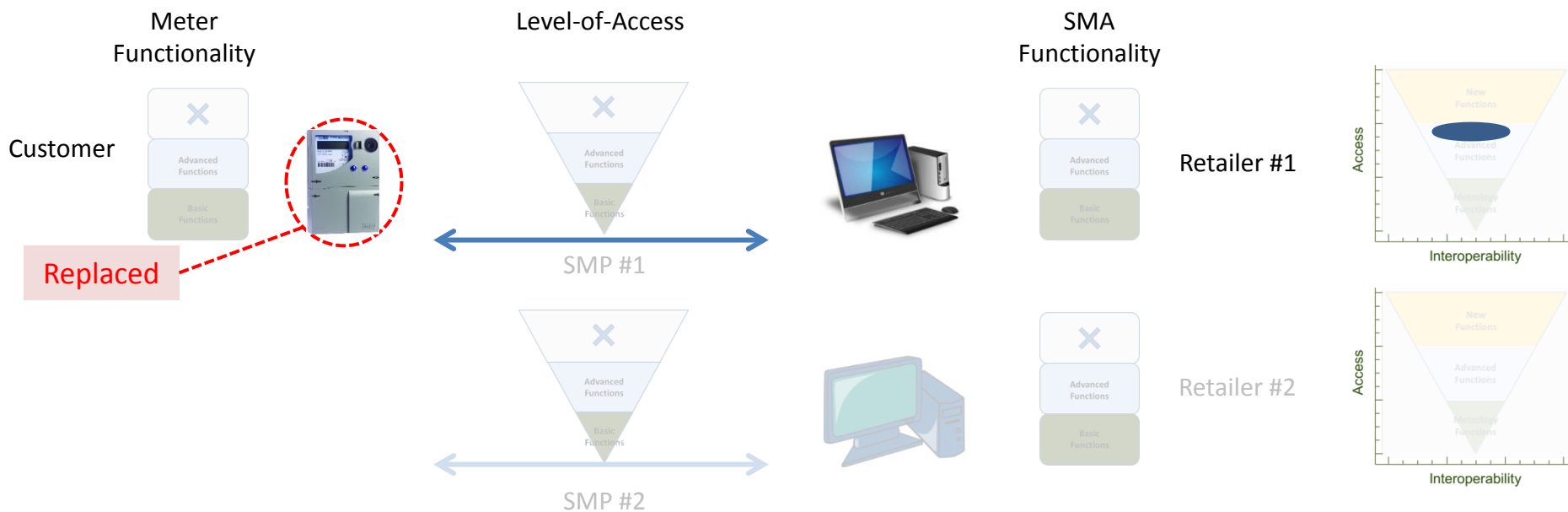
A common meter protocol supports the efficient replacement of meters

Customer chooses a new meter

Scenario

Customer chooses a new meter (via their contact with an MC)

There are no other changes



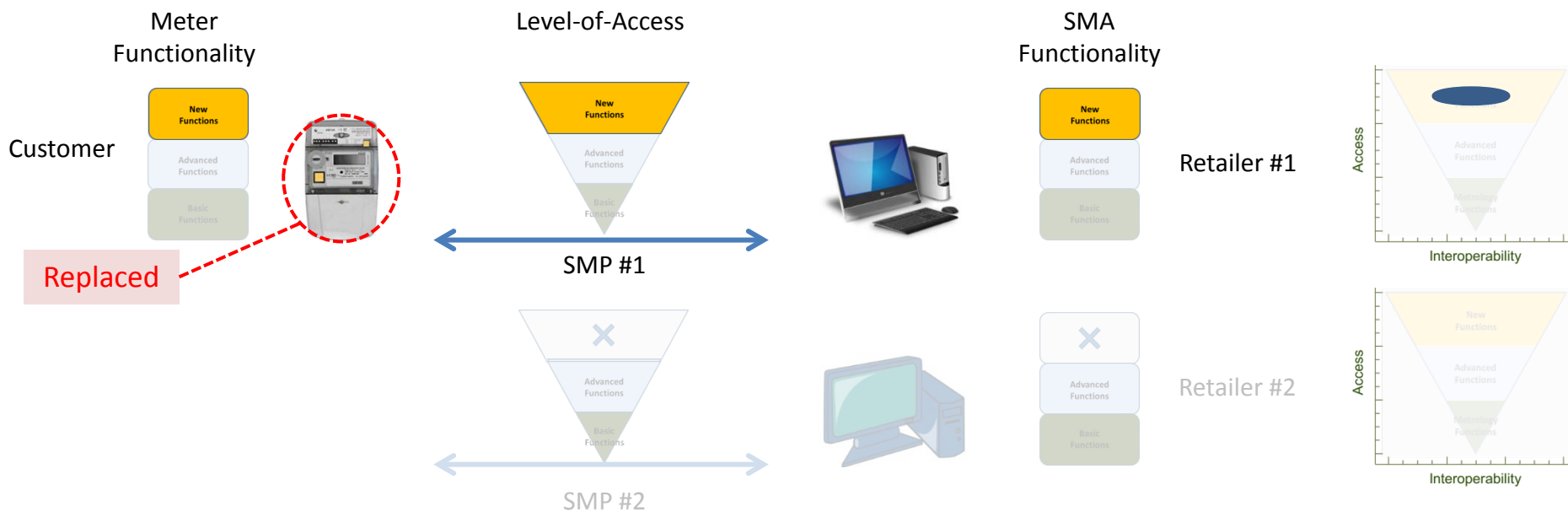
Suggested Policy Position for discussion
 A common meter protocol supports customer choice of meters

Customer chooses a new meter

Scenario

Customer receives a new meter from their existing retailer

New meter contains New Functionality



Suggested Policy Position for discussion

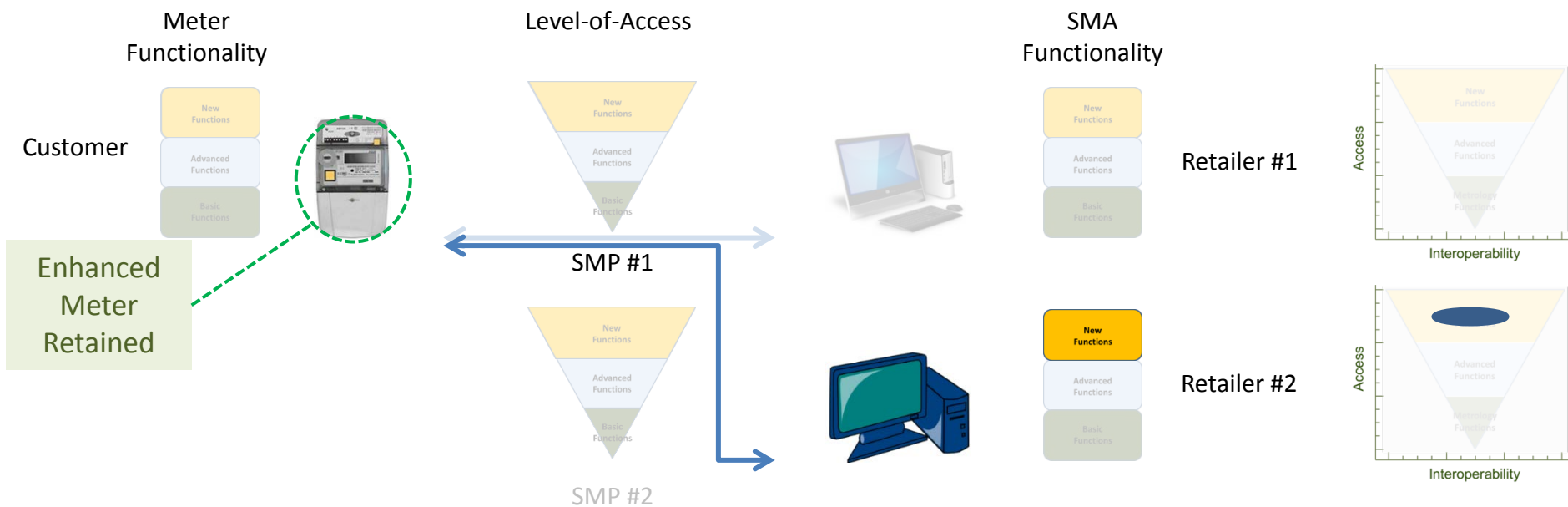
The accredited party introducing new functionality must initiate protocol updates

Customer chooses Retailer #2

Scenario (Customer already has a Smart Meter with New Functionality)

Customer chooses to change to Retailer #2

Retailer #2 continues to use SMP #1 as the Point-of-Entry



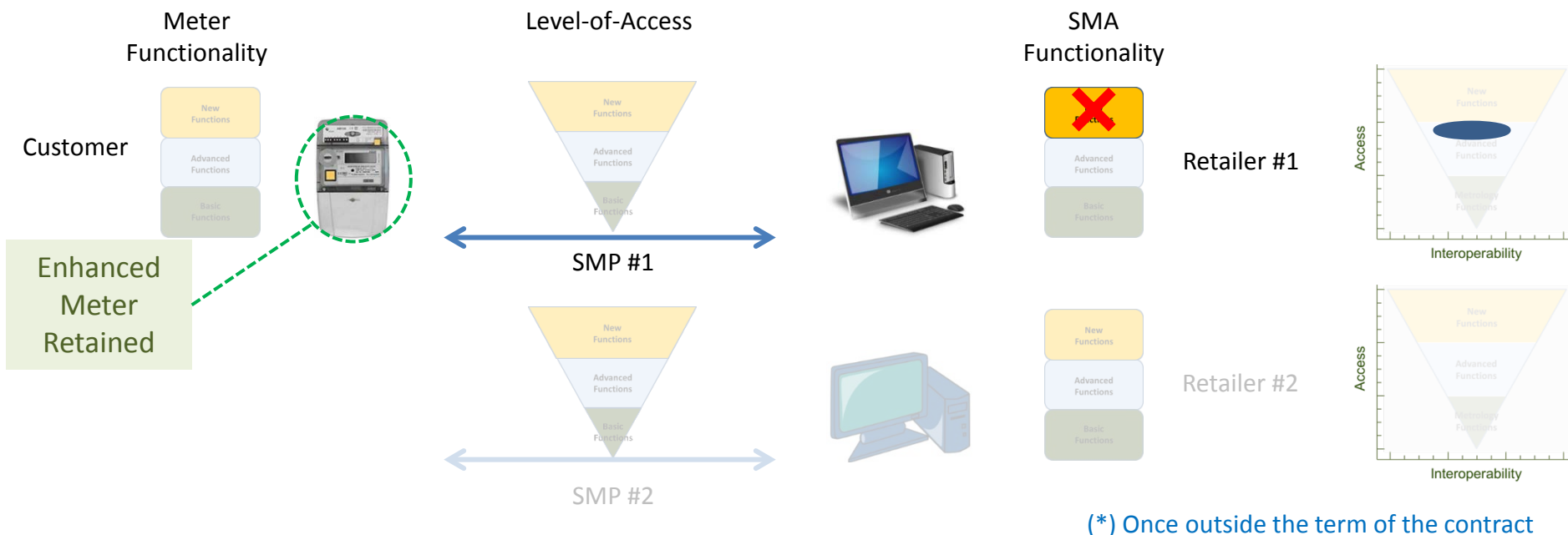
Suggested Policy Position for discussion

A common market protocol and functionality specification supports the efficient switching of retailers

Retailer decides to stop supporting New Functionality

Scenario (Customer already has a Smart Meter with New Functionality)

The Retailer decides to stop supporting new functionality (at the end of the contract term)



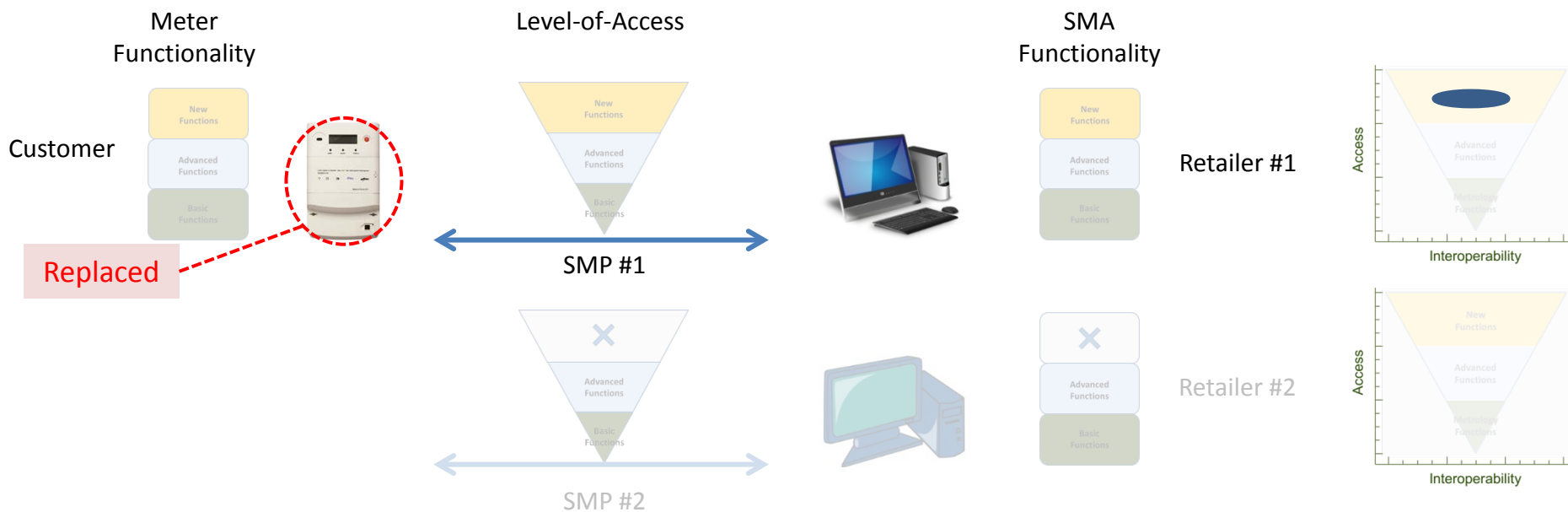
Suggested Policy Position for discussion
 A common protocol enables retailers to use existing meter functionality

Customer chooses a new meter

Scenario (Customer already has a meter with New Functionality)

Customer accepts an offer to replace their meter retaining the functionality

The new meter must offer similar functionality to the original meter



Suggested Policy Position for discussion

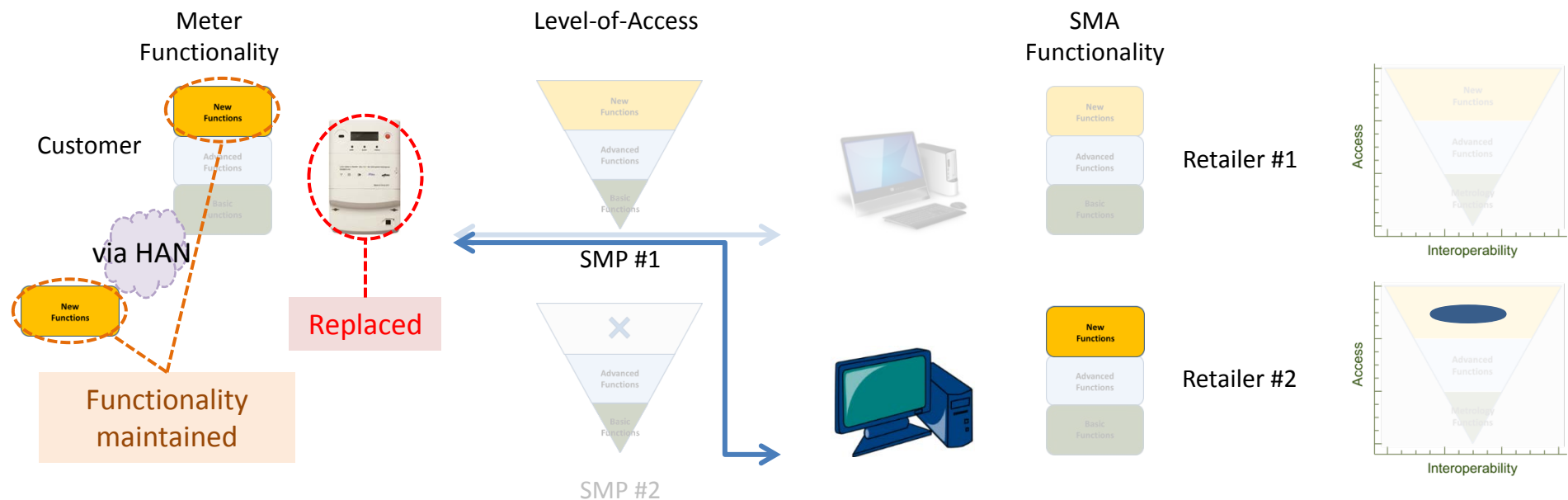
A common protocol provides enduring interoperability of new functionality

Customer chooses Retailer #2

Scenario (Customer has New Functionality provided externally to the meter)

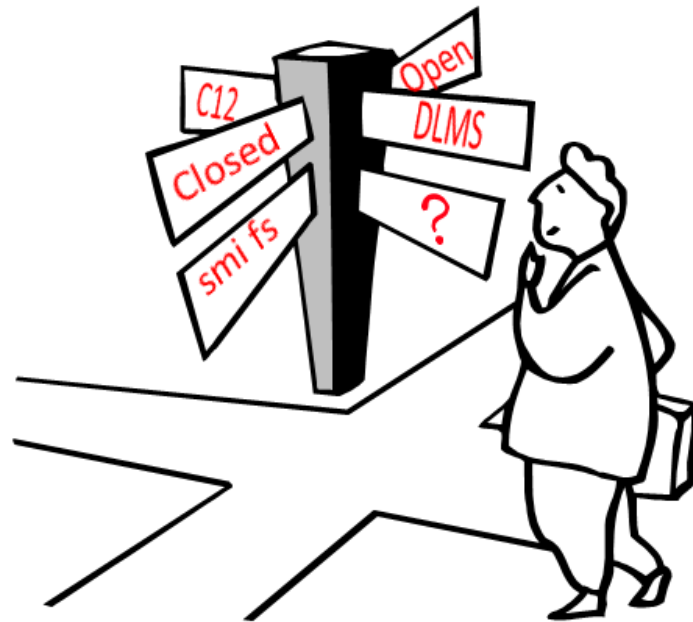
Customer chooses Retailer #2 and consents to a meter change

The customer has chosen to retain existing New Functionality



Suggested Policy Position for discussion
 A functional specification is required to ensure Retailers ability to support existing functionality

Questions

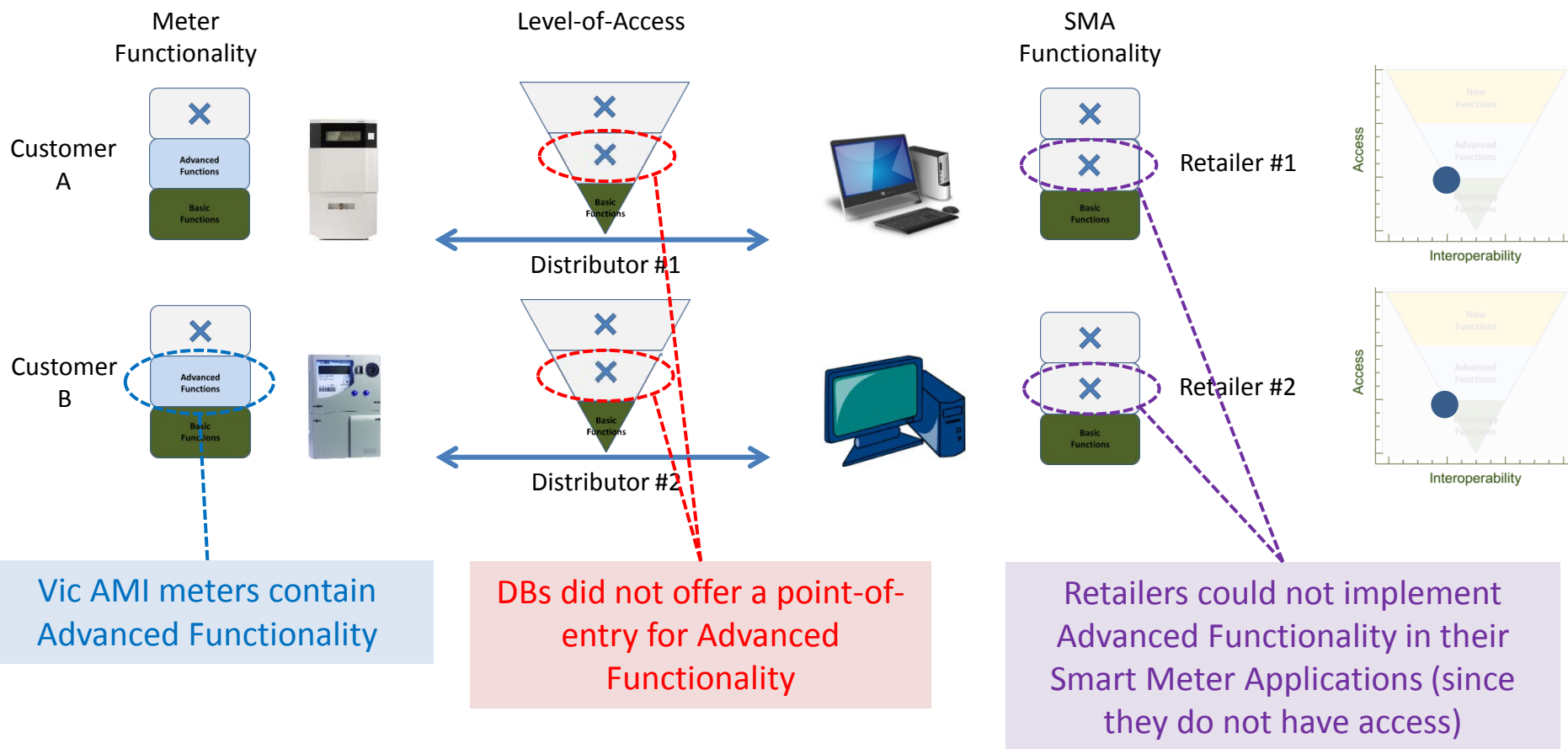


Appendix

Victorian AMI Rollout

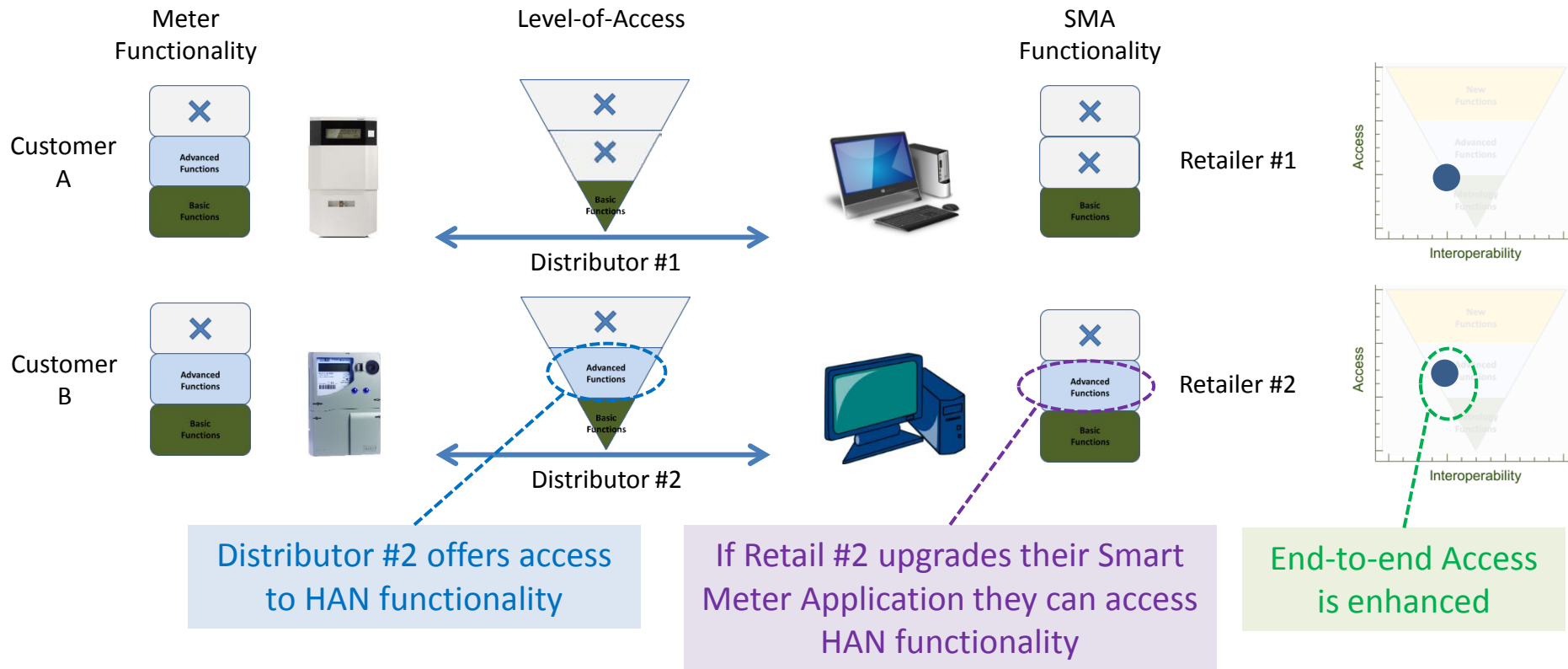
Victorian AMI – Initial Situation

When Advanced Meters first installed



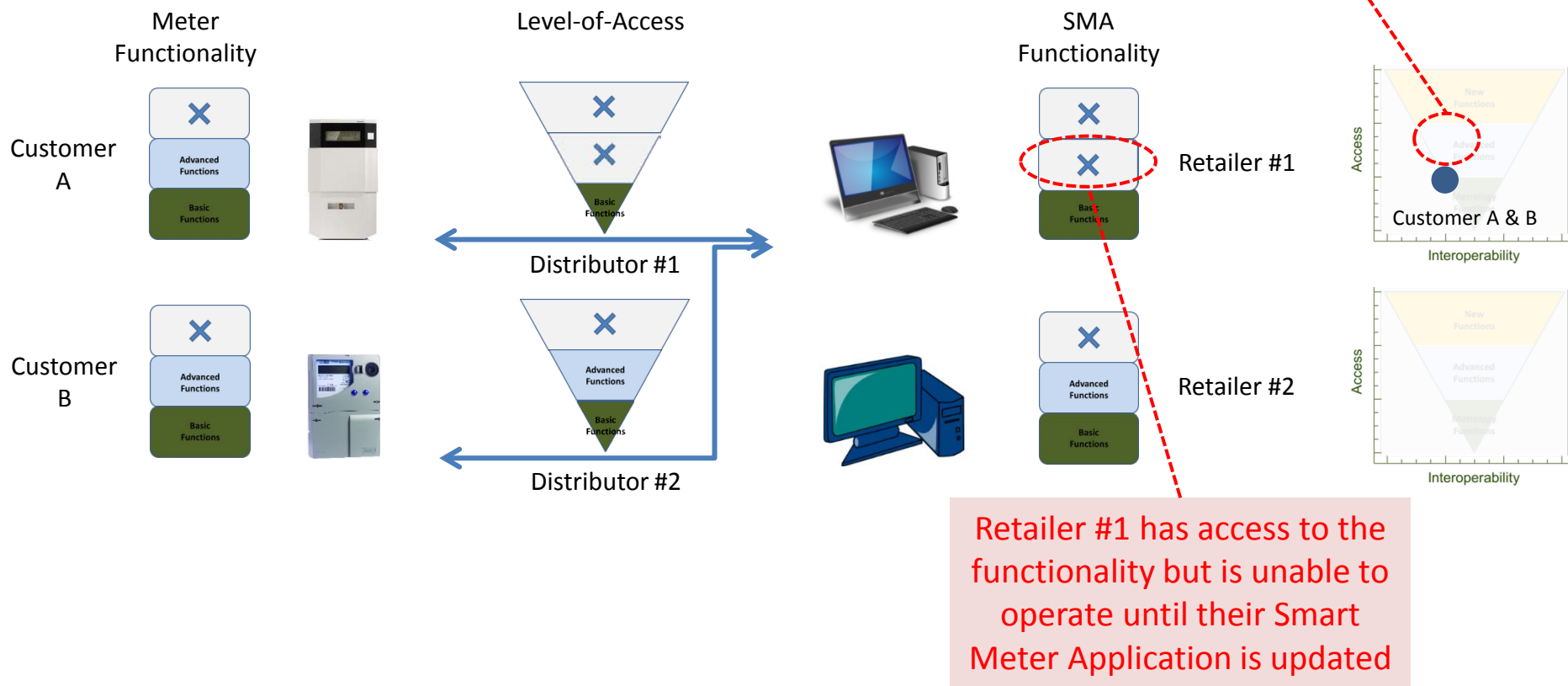
Victorian AMI – Current Situation

Retailer #2 can now offer HAN products to Customer B e.g. an In Home Display (IHD)



Victorian AMI – Retailer Switching (Example 1)

Customer B switches to Retailer #1 and their IHD stops working



Victorian AMI – Retailer Switching (Example 2)

Customer A switches to Retailer #2 but can't get an IHD

