MHHS PROGRAMME
Industry-led, Elexon facilitated

D-023- TOM Implementations & MDR ID

MHHS-DEL1385 v4.0

Provided for participant education & support
Design Team – Updated by CPT 20/6/23

Context

The MHHS TOM created a number of new industry participant Roles, two of those serving the Smart Segment being:

- **Smart Data Service (SDS)** – "appointed" by the Supplier, via Registration Service using MHHS Interfaces, responsible for the collation, validation, and submission of Consumption Data into Settlements
- **Meter Data Retriever (MDR)** – "instructed" by the SDS, via bi-laterally agreed proprietary mechanism, responsible for recovery of consumption data from smart meters via interaction with the DSP

As is the case in the current market model, the TOM provides for near total flexibility in how these roles are fulfilled:

- **Fully separated** – Supplier, SDS, and MDR are all fully independent *separate organisations* ~ equivalent to a Supplier contracting with 3rd party companies to under take the existing [MOP], DC and DA roles
- **Fully integrated** – Supplier chooses to under take SDS and MDR roles themselves ~ equivalent to the use of 'In-House' agents in the current model
- **Mixed** – Supplier chooses to use a 3rd party to perform the SDS Role, but under takes the role of MDR themselves – possibly to leverage re-use of their existing access to the DSP, and the data they already recover from Smart Meters as part of BAU operations ~ compare with an in-house DC & outsourced DR currently
- **Hybrid** – strategic implementation of combinations of some or all of the above models ~ for example the use of the Integrated model for 'own brand' customers, but the Mixed model for a 'White Label' brand; or the use of different models for different Customers Types (risk, behavior, metering, tariff)

Within each of these options there is the possibility of the supplier providing some (or all) of the consumption data it acquires as part of its BAU activity, as a Supplier, to the SDS. However, in the same way as under the current model all [metered] MPANs should have a DC/MOP/DA appointed. Under the MHHS TOM …

… ALL MPANS must have a Data Service (SDS) appointed AND an MDR specified as part of that SDS appointment … … (they must have a Metering Service too!)

Registration & Qualification

As is the case in the current market model, *organisations will need to 'declare' / register their intention to operate in a particular MHHS market role* – this may or may not involve a qualification process.
The exact process for registration and any associated qualification activity, for the SDS & MDR Roles, is still under active discussion within the Programme and with industry participants in the Qualification Working Group and its associated deliverables.

Smart Data Service (SDS)

- Any party wishing to operate as an SDS will need to Register their intent with BSCCo, and will be allocated a DIP ID, this will be assigned to the DIP SDS Role
- Party will need to nominate what DTN Market Participant ID they intend to use when transacting as an SDS via the DTN

Meter Data Retriever (MDR)

- Any party wishing to operate as an MDR will need to Register their intent with BSCCo, and will be allocated a DIP ID, this will be assigned to the DIP MDR Role
- Party will need to nominate what DTN Market Participant ID they intend to use when transacting as an MDR (Ref Note 2 below)
- Accede to the SEC (if not already done so) and subsequently register in the 'Meter Data Retriever' DCC User Role, undertaking the associated UEPT and other assurance processes required for this – please contact SECAS at secas@gemserv.com to initiate this process and DCC at mhhs@smartdcc.co.uk to understand the implications of UEPT

Suppliers Acting as an SDS / MDR

- Suppliers that have not yet acceded to the SEC will first need to complete this and any associated UEPT and other assurance processes as a Supplier – please contact SECAS at secas@gemserv.com to initiate this process and DCC at mhhs@smartdcc.co.uk to understand the implications of UEPT
- If acting as the MDR for its own customers, a Supplier can collect the required data for MHHS from smart meters using its 'Import Supplier' and 'Export Supplier' DCC User Roles. Alternatively, the Supplier can choose to also register in the 'Meter Data Retriever' DCC User Role (undergoing any further UEPT that may be required for this) and use this to collect data for MHHS – please contact SECAS at secas@gemserv.com to initiate this process
- As above, a Supplier, wishing to act as an SDS and/or MDR will still need to register their intent to perform these roles with BSCCo – any existing DIP ID(s) held by the Supplier will be extended to encompass additional DIP Roles as appropriate

Note 2: Where a party already has an MPID, they can choose to reuse that MPID (i.e. existing Supplier or SDS MPID); Or in cases of '*new*' 3rd party MDRs BSCCo will assign a new MPID e.g. MDR1. Allocation of this MPID is purely to work around the constraints within the existing ERDA interface – the MDR will never actually transact over the DTN.

Supplier MDR Options at an MPAN Level

- As part of the Supplier-SDS Contract negotiation, parties should agree on the MDR (or MDRs multiple) that the SDS is expected to support as part of that contract
- The SDS Appointment process allows a Supplier the option of specifying a specific MDR for use with a particular MPAN, or leaving MDR blank
- If the Supplier does not specify an MDR as part of the appointment process, then the SDS is able to take the following actions (ideally this should again be agreed as part of the Supplier-SDS Contract):
    - Accept the Appointment – SDS would go on to nominate the contractually agreed 'default' MDR
    - Reject the Appointment - SDS agreement with Supplier specifies that Supplier should always nominate an MDR
    - Reject the Appointment - Supplier has specified an MDR that is not supported by / been agreed in advance with, the SDS
- In responding to the Registration Service, an SDS *must* specify an MDR in order for that Appointment / Prospective Appointment to be able to proceed
- The MHHS Design & validations ensure that only a single 'SDS==MDR' combination can exist for any given MPAN on any given day

Changes in MDR

- Subject to the consideration of the issues above (and any contractual agreements with the SDS), a Supplier may change the MDR of a specific MPAN using the process "BP003B Change of Existing Service" and "IF-031 Scenario = USP"
- The MHHS Design also recognises that for contractual, operational or regulatory reasons it may be necessary for the SDS itself to initiate an change in MDR – this is again described in process "BP003B Change of Existing Service" and utilises IF-034 Event "[SDS-MDRUpdate]
- As is the convention currently, it would be expected that any 'bulk' movement/change of SDS or MDR outside of normal day-to-day volumes, would be discussed in-advance with other/impacted industry participants

Illustrations of the different SDS / MDR implementation

- The following slides attempt to show diagrammatically different SDS / MDR implementations
    - Fully Separated (with and without Supplier data sharing)
    - Fully Integrated (with and without Supplier SEC MDR Role usage)
    - Mixed
    - Hybrid

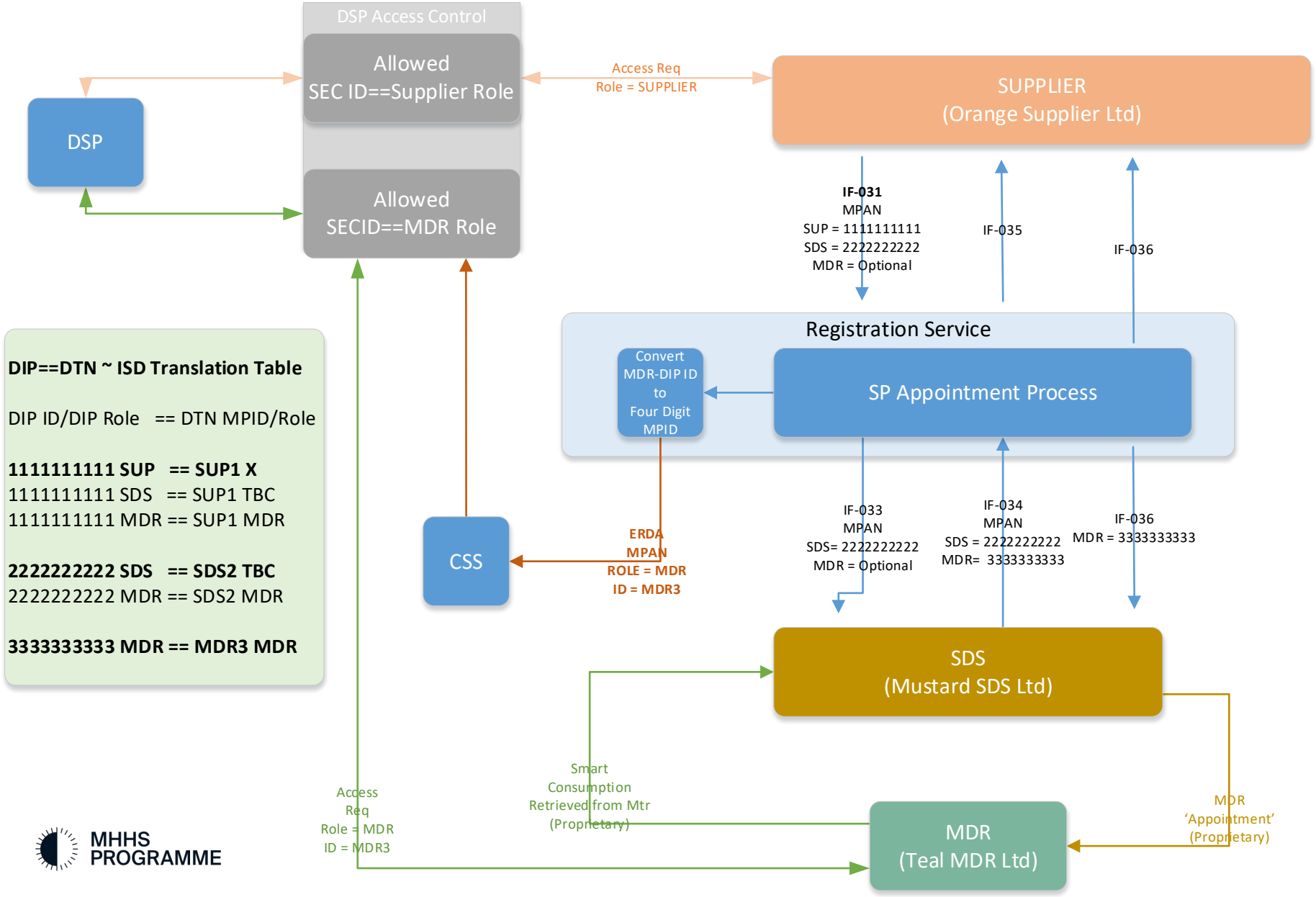
Reminder Notes

- All parties wishing to act as either an SDS or an MDR must register with BSCCo, and be assigned a DIP and Role Code(s)
- Qualification/Acceptance criteria to become an MDR is still TBC – and does not form part of Design
- Supplier can Nominate a specific MDR or leave blank, if blank SDS could either apply the 'contractual default MDR' for that Supplier or Reject
- SDS can accept or reject the Supplier Nominated MDR (assume allowable MDR's agreed as part of Supplier- SDS Contract)
- The MDR DIP ID must be specified, by the SDS, as part of IF-034

- All reference to Supplier / SDS / MDR, in MHHS Interfaces, is using DIP ID (and DIP Role code by virtue of specific fields)
- DIP ID of MDR is converted into a four digit identifier and sent to CSS/ DSP so that MDR Role access control can be maintained (ISD 'ID Look-Up' table)
- As the MDR does not transact in the DTN it does not need to have a DTN Role code per se, simply a unique four digit id e.g. MDRX
- Definitive list of "Valid MDR"s can be sourced from the 'ISD ID Look-Up table'

- How the MDR (or any other participant) is recorded/identified in participant systems is a design issue for each participant … In that they can/could store:
    - DIP ID & DIP Role only (would need to use mapping table when sending DTN flows)
    - DTN MPID & Role only (would need to use the mapping table to translate MHHS flows in and out)
    - DIP ID & DIP Role *AND* DTN MPID – Role

Model 1A ~ Fully Separated (No Supplier data sharing)



DIP==DTN ~ ISD Translation Table

DIP ID/DIP Role == DTN MPID/Role

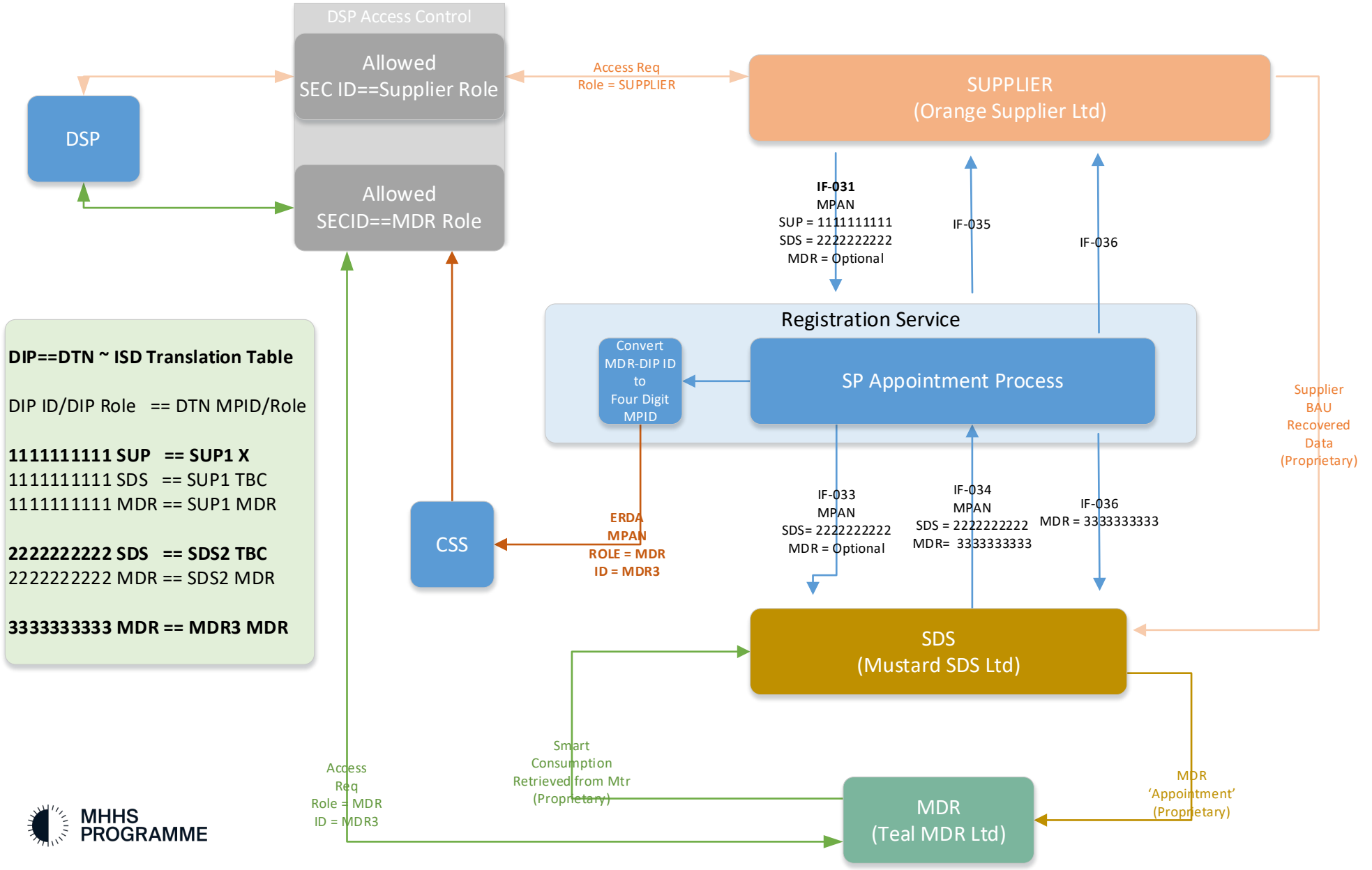
1111111111 SUP == SUP1 X
1111111111 SDS == SUP1 TBC
1111111111 MDR == SUP1 MDR

2222222222 SDS == SDS2 TBC
2222222222 MDR == SDS2 MDR

3333333333 MDR == MDR3 MDR

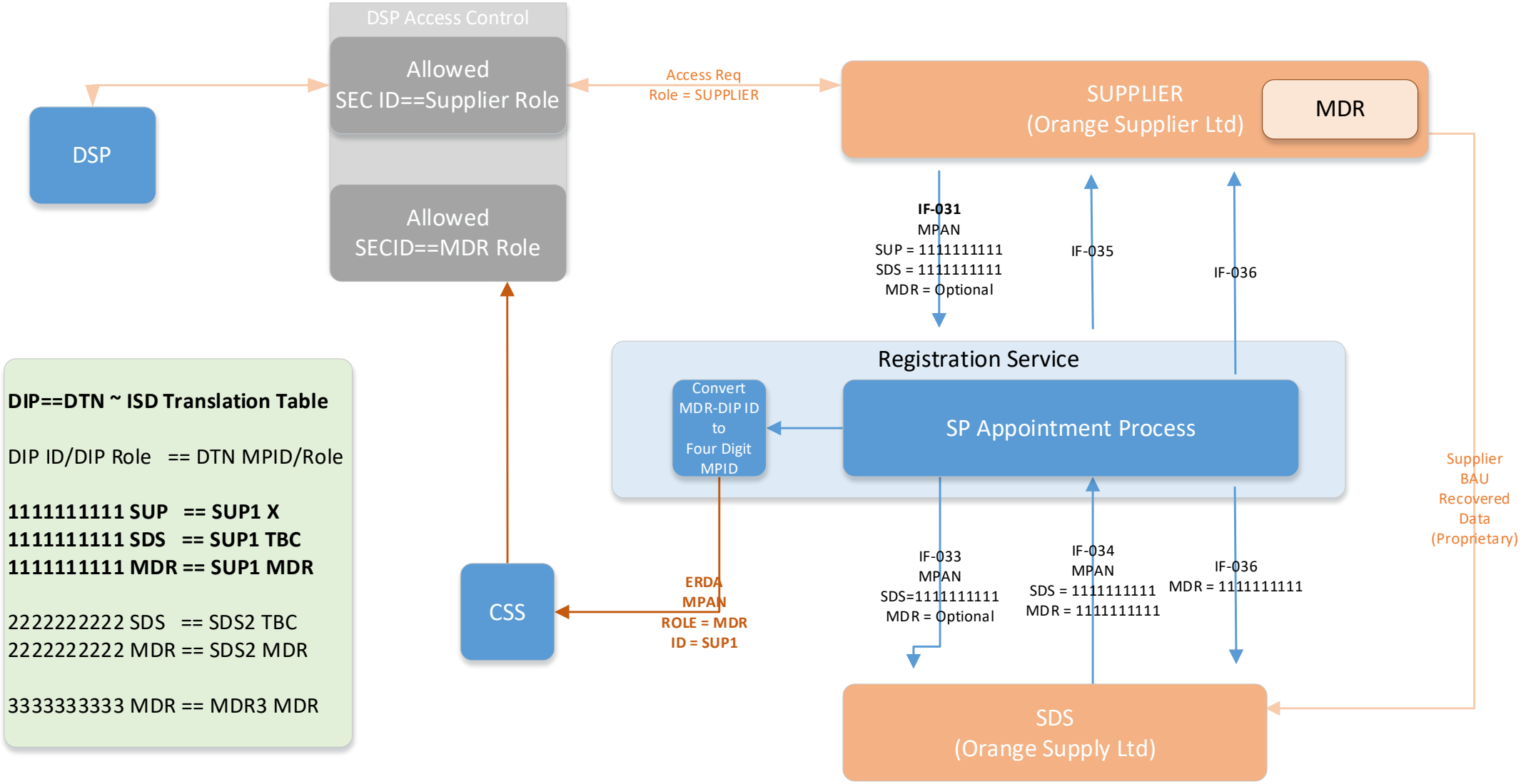
- Supplier, SDS, and MDR are all independent organisations
- SDS will have had to approach BSCCo to register as an SDS
- MDR will have had to approach BSCCo to register as an MDR & SEC to obtain SEC ID / MDR Role access
- Supplier shares no data with SDS

Model 1B ~ Fully Separated (with Supplier data sharing)



- Supplier, SDS, and MDR are all independent organisations
- SDS will have had to approach BSCCo to register as an SDS
- MDR will have had to approach BSCCo to register as an MDR & SEC to obtain SEC ID / MDR Role access
- Supplier shares data with SDS

Model 2A ~ Fully Integrated (Supplier uses existing SEC Role)



DIP==DTN ~ ISD Translation Table

DIP ID/DIP Role == DTN MPID/Role

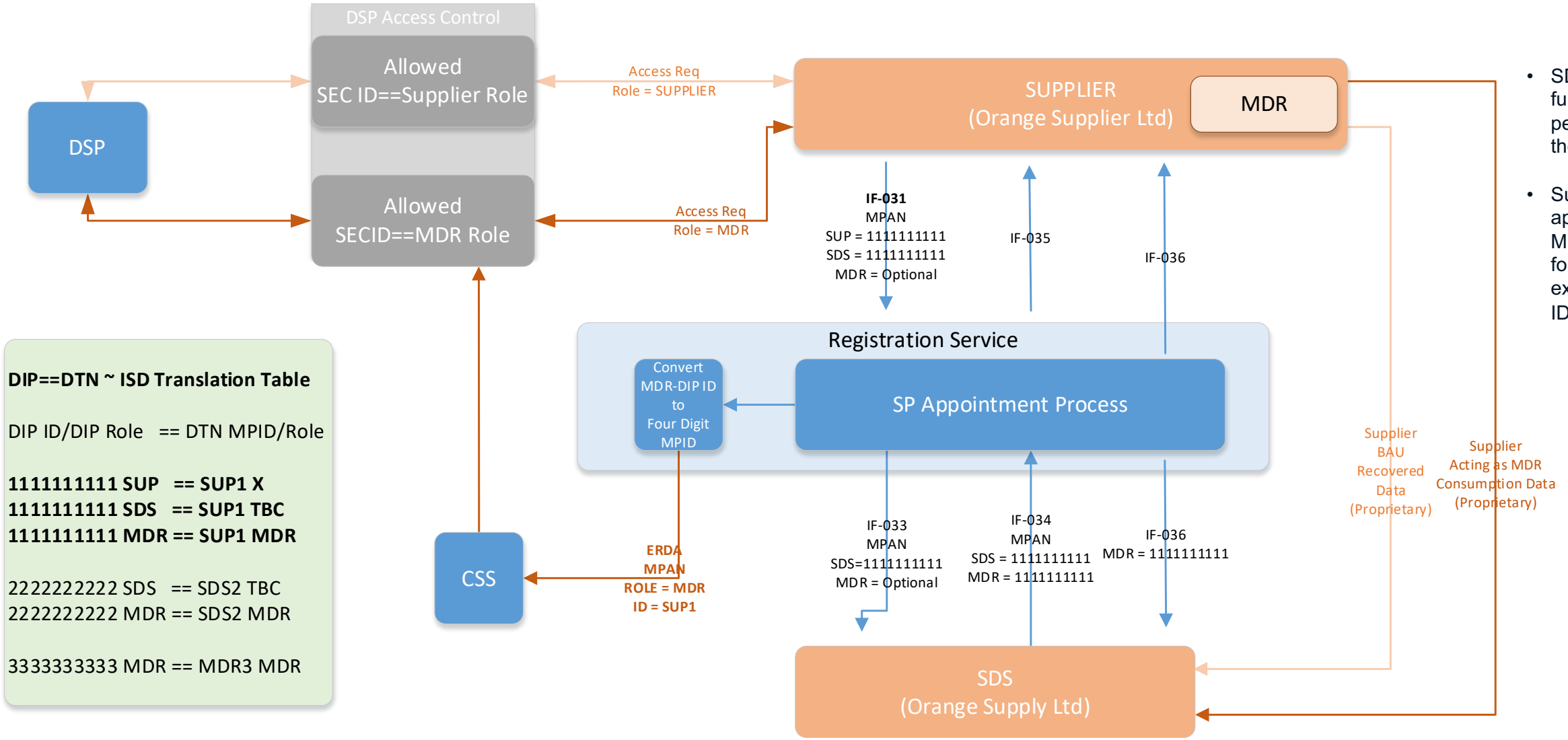
1111111111 SUP == SUP1 X
1111111111 SDS == SUP1 TBC
1111111111 MDR == SUP1 MDR

2222222222 SDS == SDS2 TBC
2222222222 MDR == SDS2 MDR

3333333333 MDR == MDR3 MDR

- SDS and MDR functions are performed by the Supplier
- Supplier only uses their existing 'supplier' SEC access

Model 2A ~ Fully Integrated (Supplier uses existing & MDR Role SEC Access)



DIP==DTN ~ ISD Translation Table

DIP ID/DIP Role == DTN MPID/Role

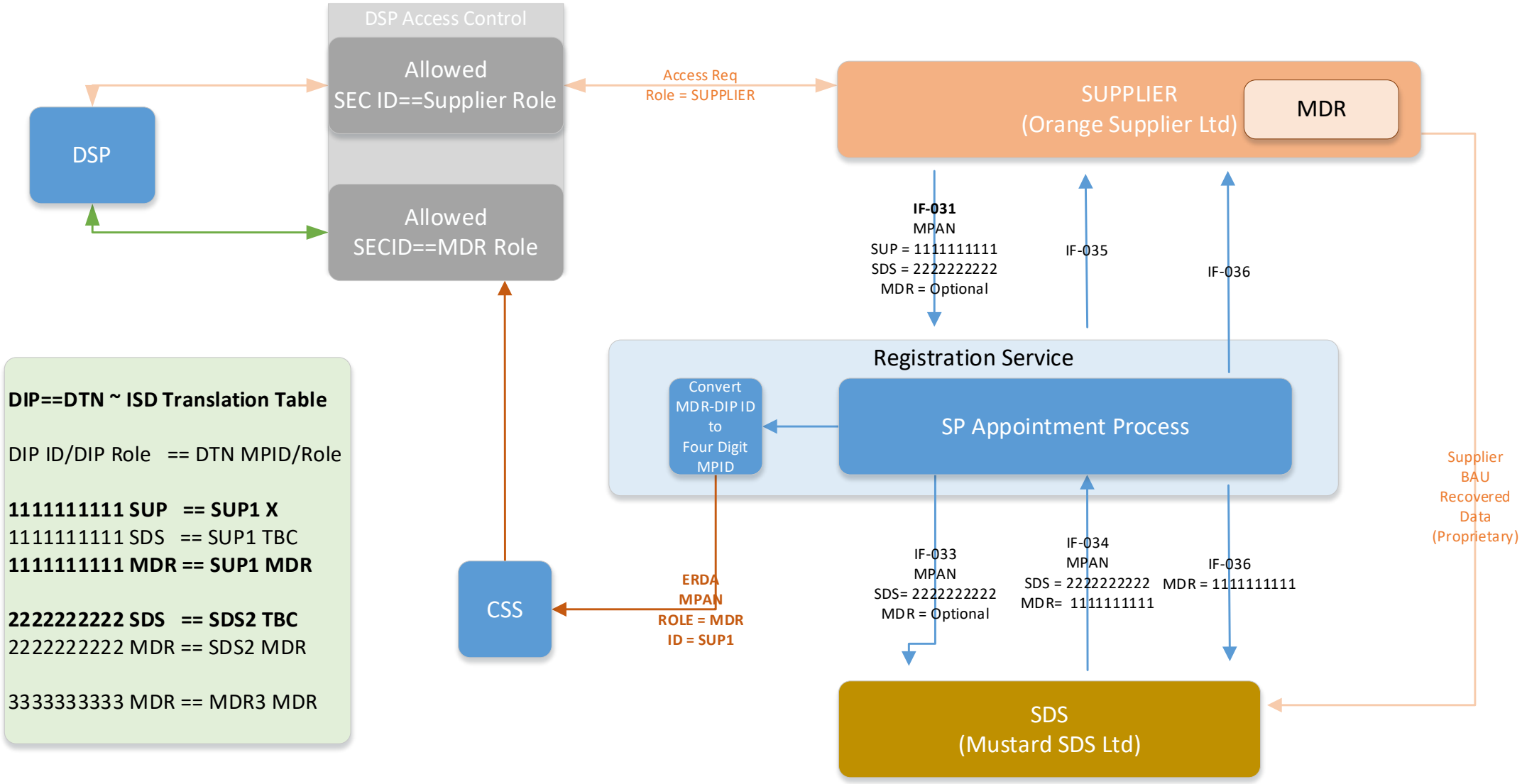
1111111111 SUP == SUP1 X
1111111111 SDS == SUP1 TBC
1111111111 MDR == SUP1 MDR

2222222222 SDS == SDS2 TBC
2222222222 MDR == SDS2 MDR

3333333333 MDR == MDR3 MDR

- SDS and MDR functions are performed by the Supplier
- Supplier applies for MDR access for their existing SEC ID

Model 3A ~ Mixed (Supplier uses existing SEC Access)



DIP==DTN ~ ISD Translation Table

DIP ID/DIP Role == DTN MPID/Role

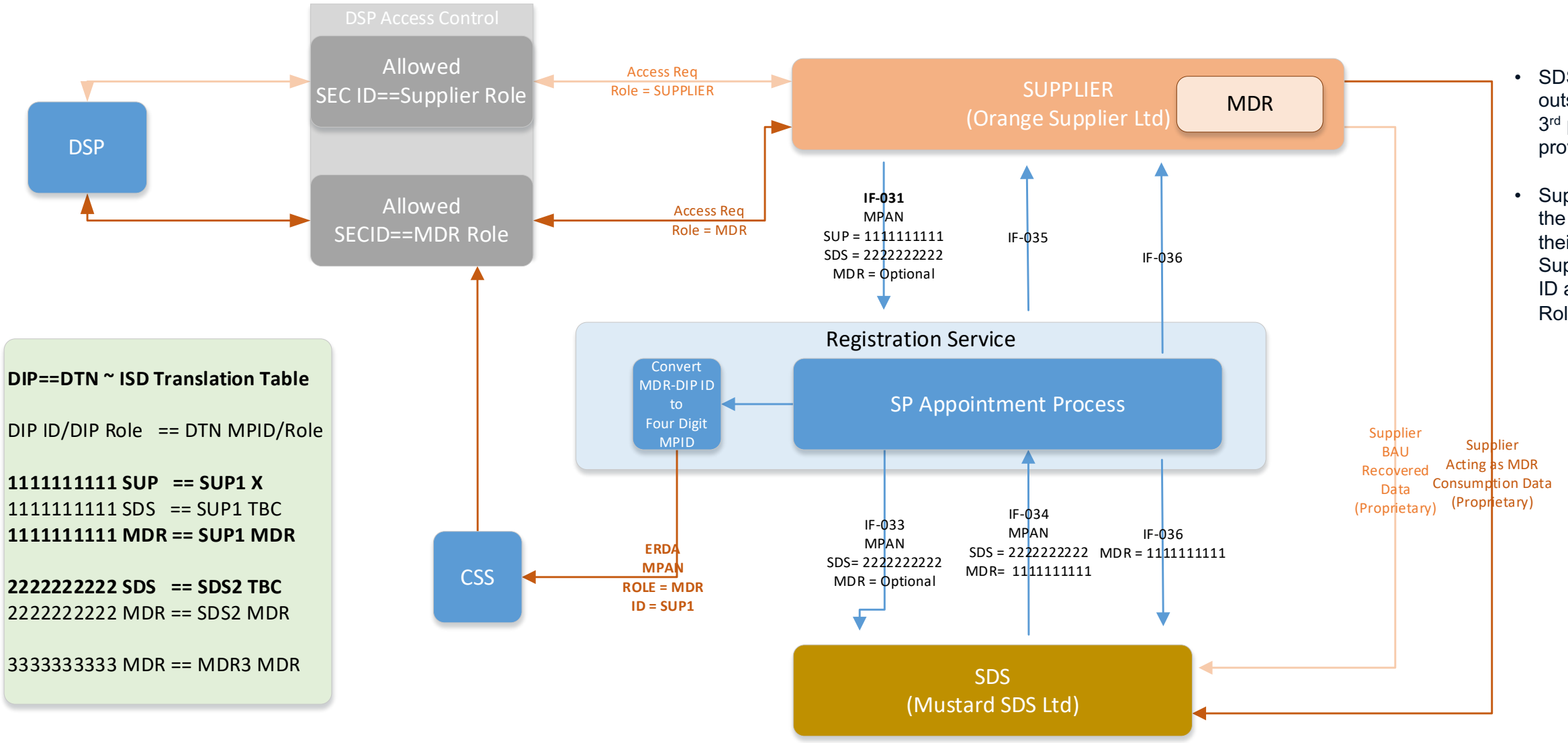
1111111111 SUP == SUP1 X
1111111111 SDS == SUP1 TBC
1111111111 MDR == SUP1 MDR

2222222222 SDS == SDS2 TBC
2222222222 MDR == SDS2 MDR

3333333333 MDR == MDR3 MDR

- SDS function is outsourced to a 3rd party provider
- Supplier acts as the SDS using their existing Supplier SEC ID and access

Model 3A ~ Mixed (Supplier uses existing & MDR SEC Access)



DIP==DTN ~ ISD Translation Table

DIP ID/DIP Role == DTN MPID/Role

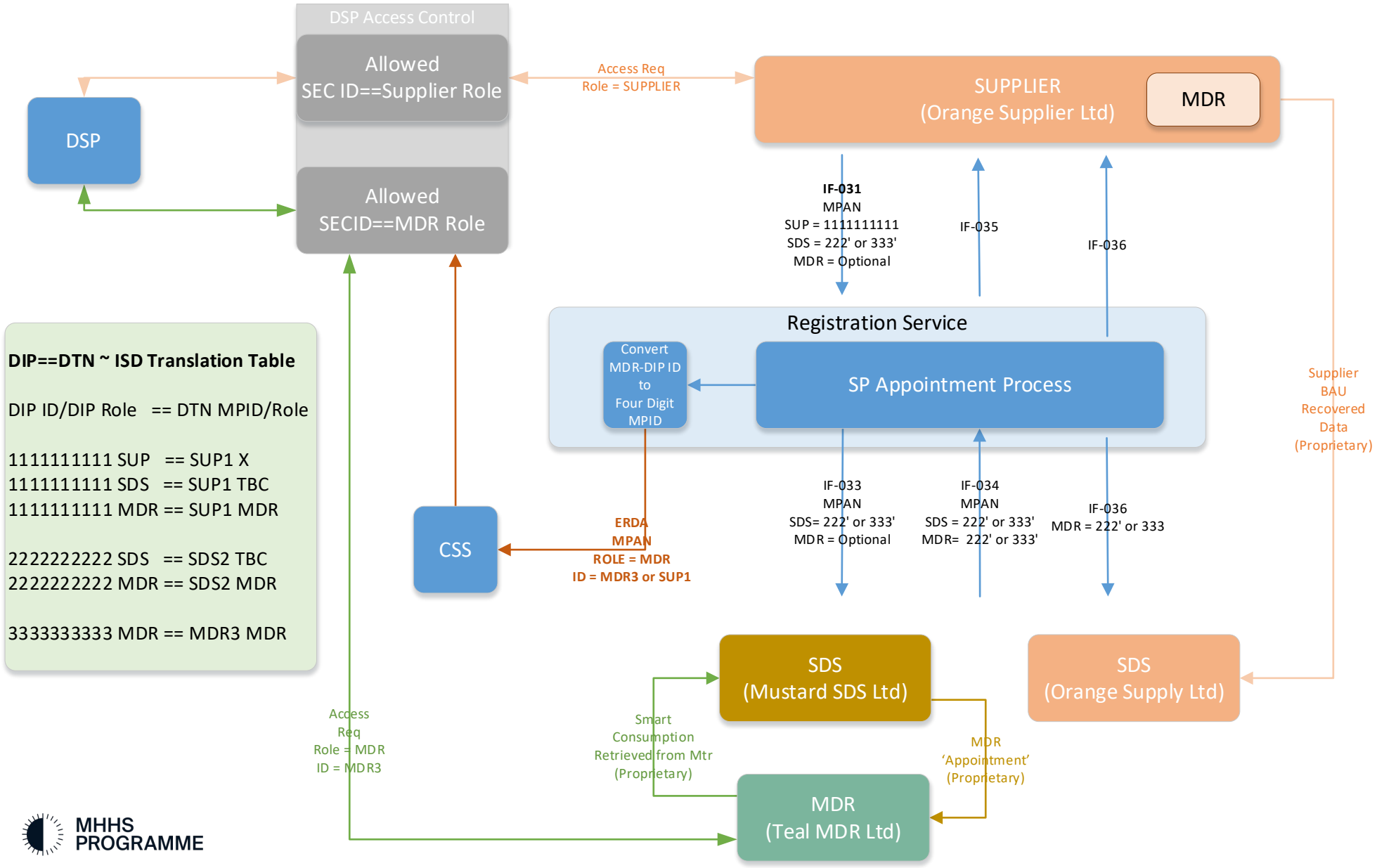
1111111111 SUP == SUP1 X
1111111111 SDS == SUP1 TBC
1111111111 MDR == SUP1 MDR

2222222222 SDS == SDS2 TBC
2222222222 MDR == SDS2 MDR

3333333333 MDR == MDR3 MDR

- SDS function is outsourced to a 3rd party provider
- Supplier acts as the SDS using their existing Supplier SEC ID and an MDR Role

Model 4A ~ Hybrid Model



- Supplier implements a hybrid model
- Supplier uses 'in-house' SDS and MDR for it's own brand customers
- 3rd Party SDS and MDR arrangement is used for White Label brand.