

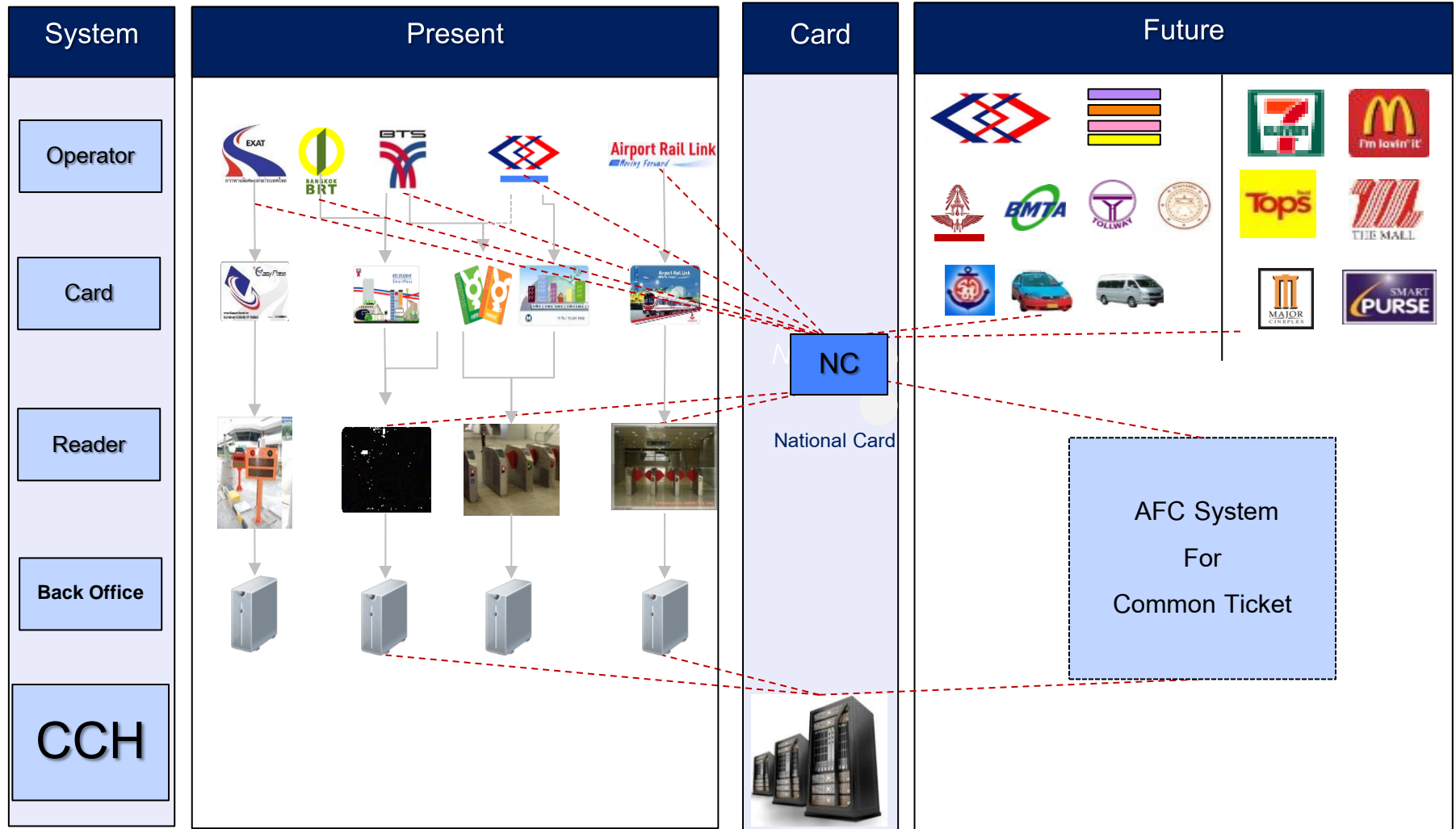
Common Ticketing System



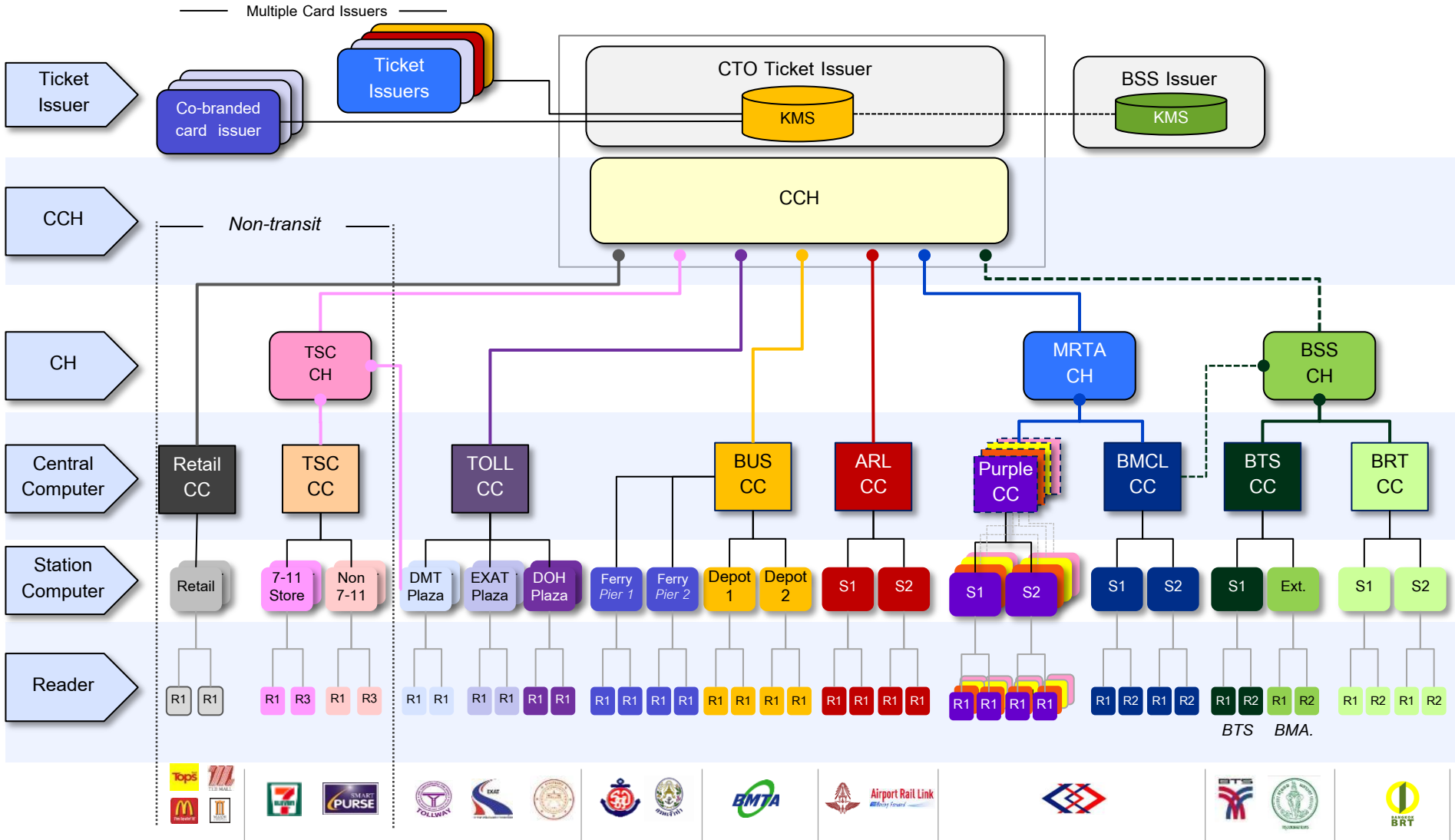
Presented by : Padet Praditphet, Ph.D.
Acting Director of Common Ticketing Administration Bureau
Office of Transport and Traffic Policy and Planning (OTP)
Ministry of Transport



Concept of Common Ticketing Policy



Overall System Functionality

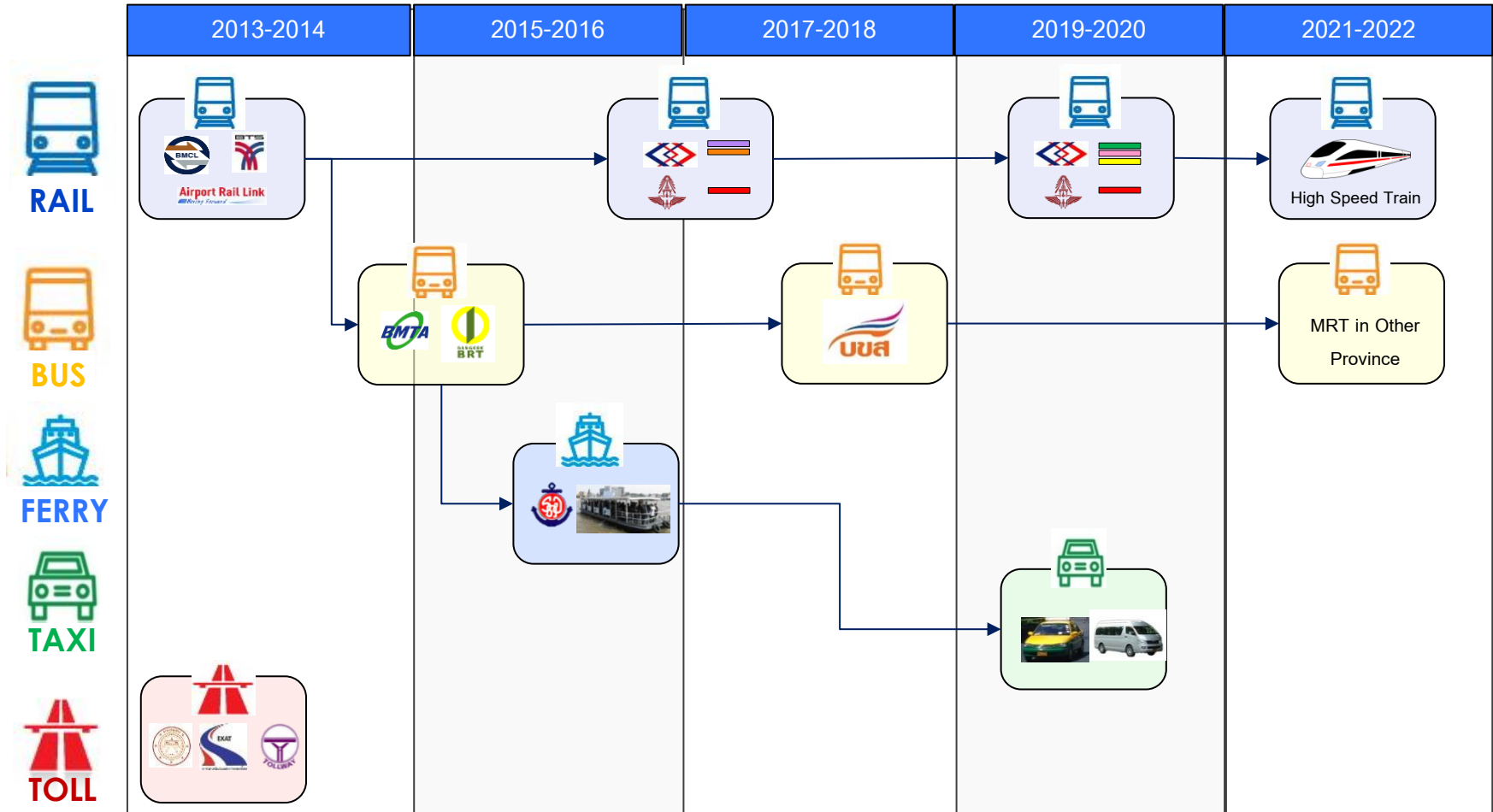


R1 Reader (SAM) for national card standard

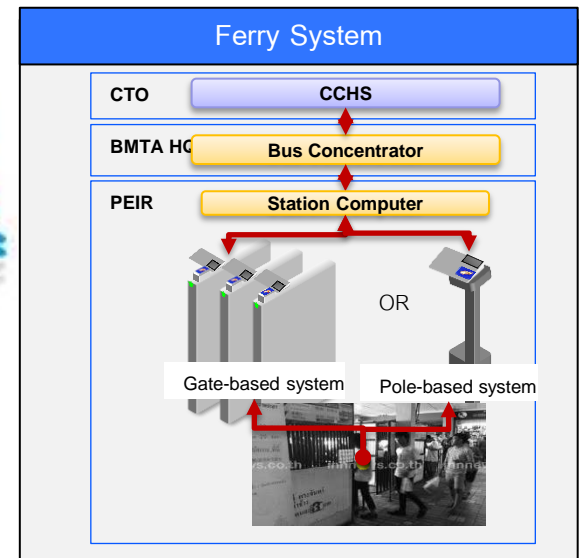
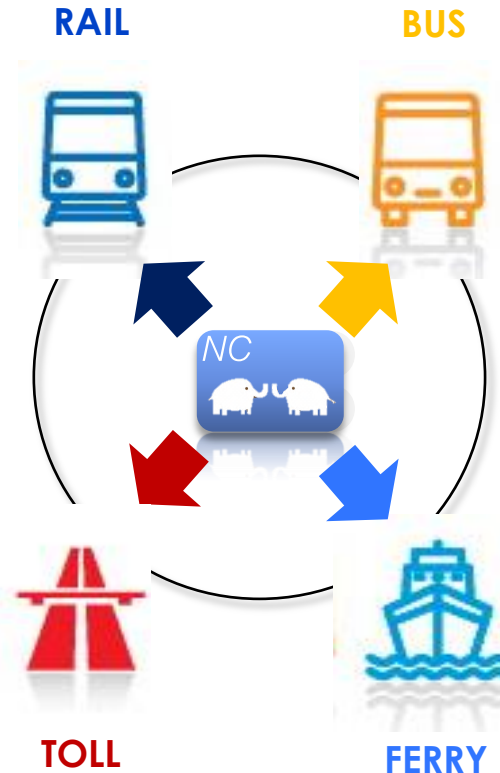
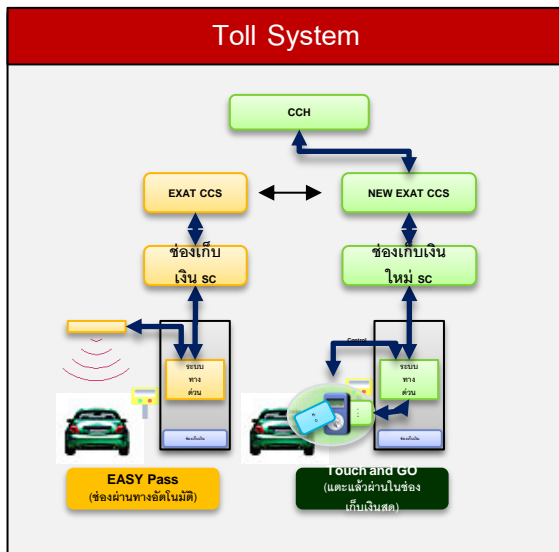
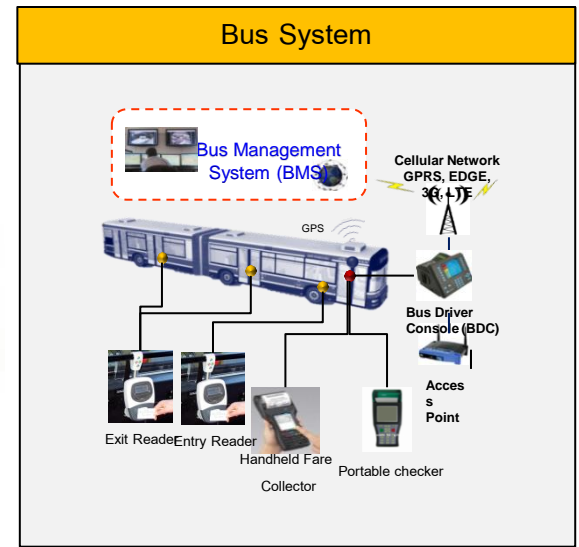
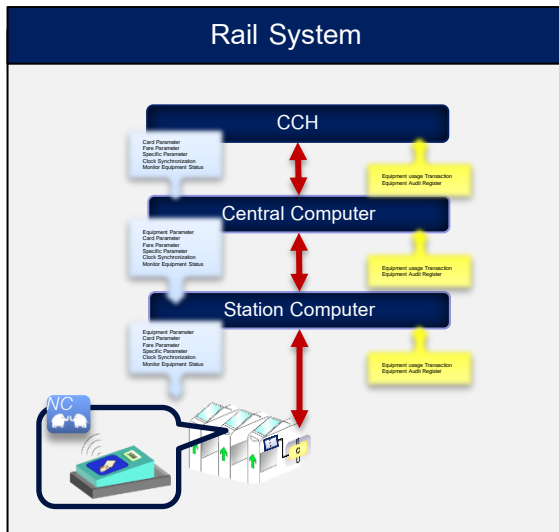
R3 Reader (SAM) for existing non-transit card standard

R2 Reader (SAM) for existing transit card standard

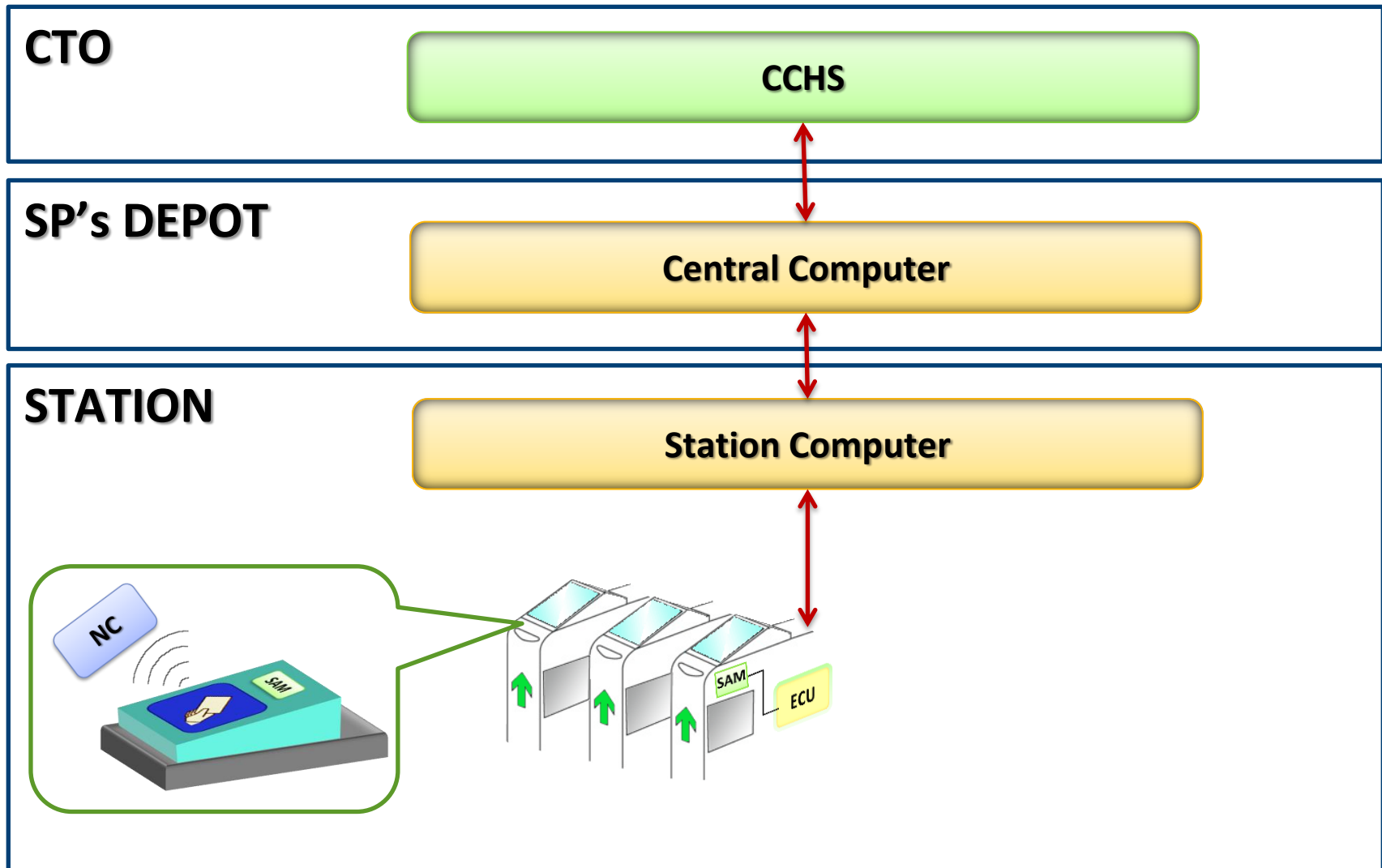
Common Ticketing Plan



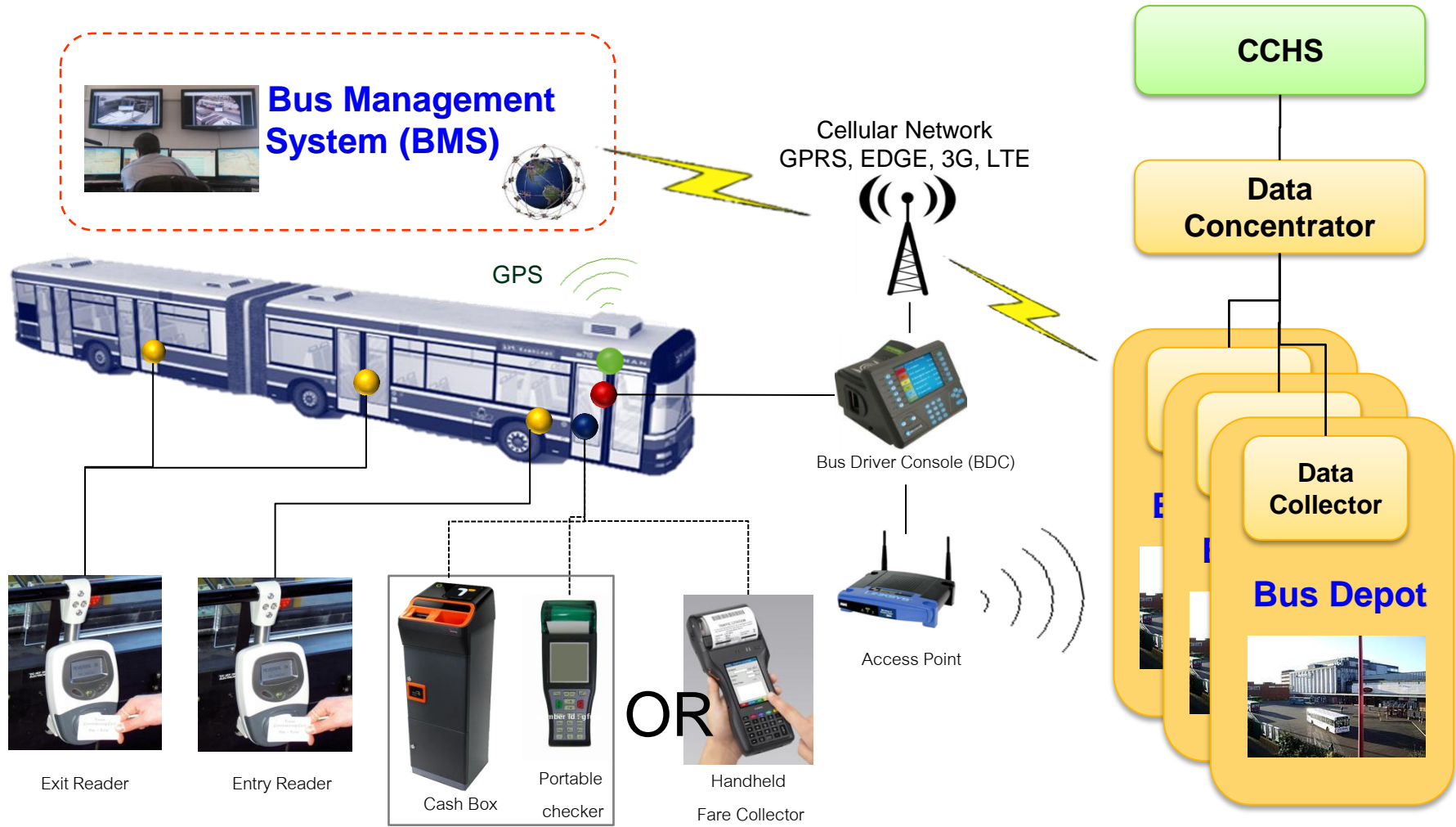
Common Ticketing System



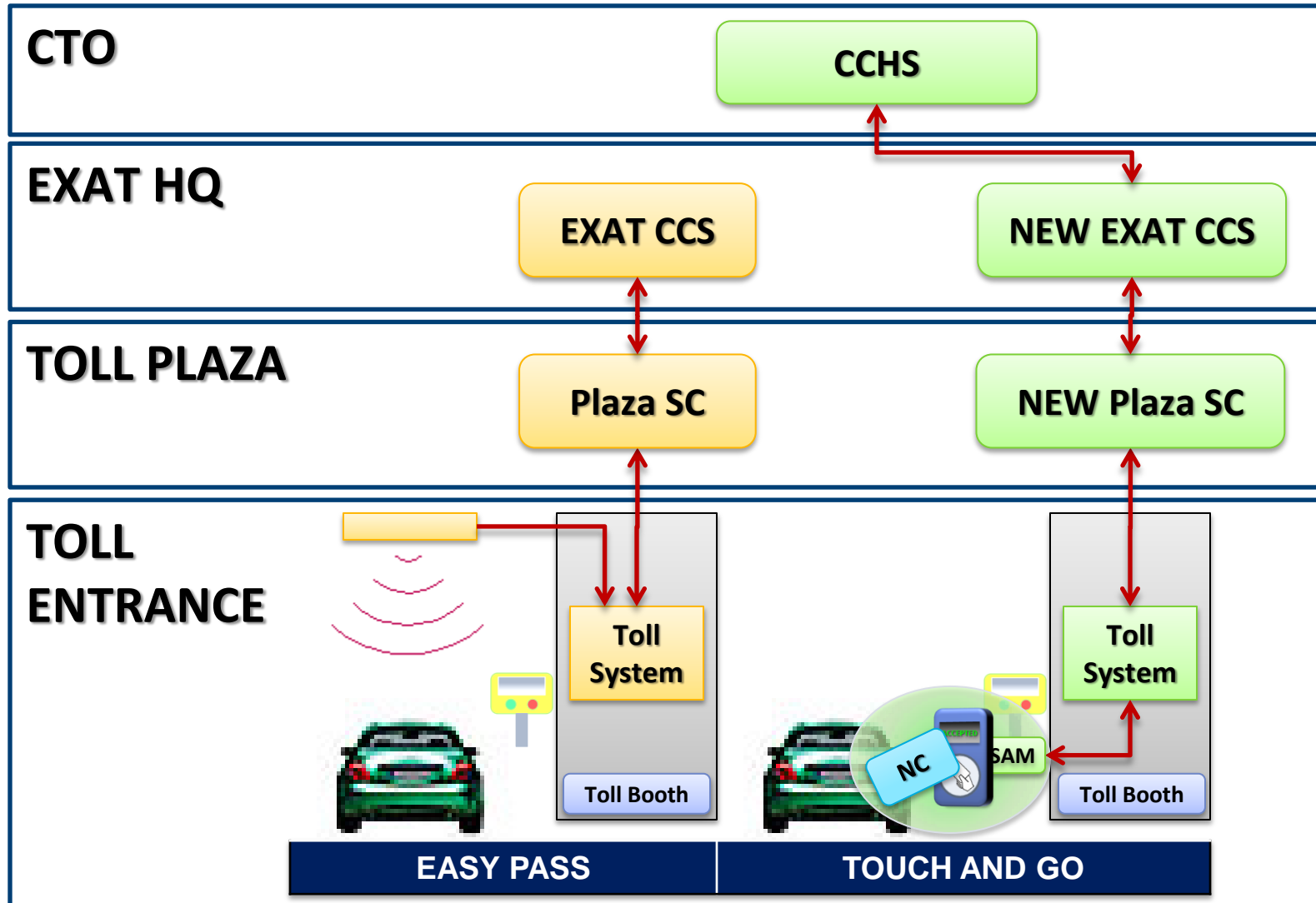
Metro Rail



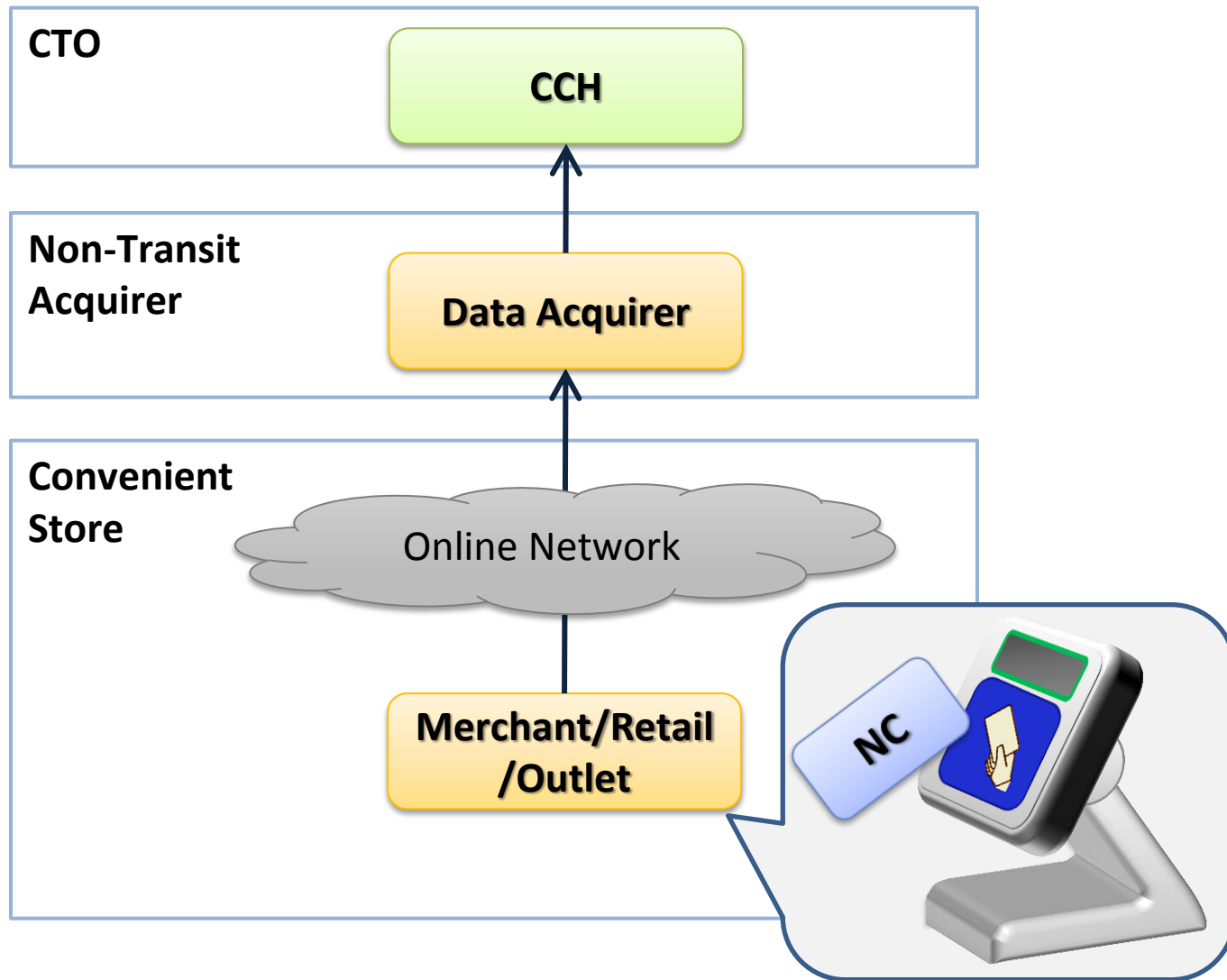
PUBLIC BUS



Toll way (Touch And Go)



Non-Transit



Card Structure Concept

Transit Card Standard Specification

❖ Commands & Definition

- command definition to communicate with out-world

❖ Protocols

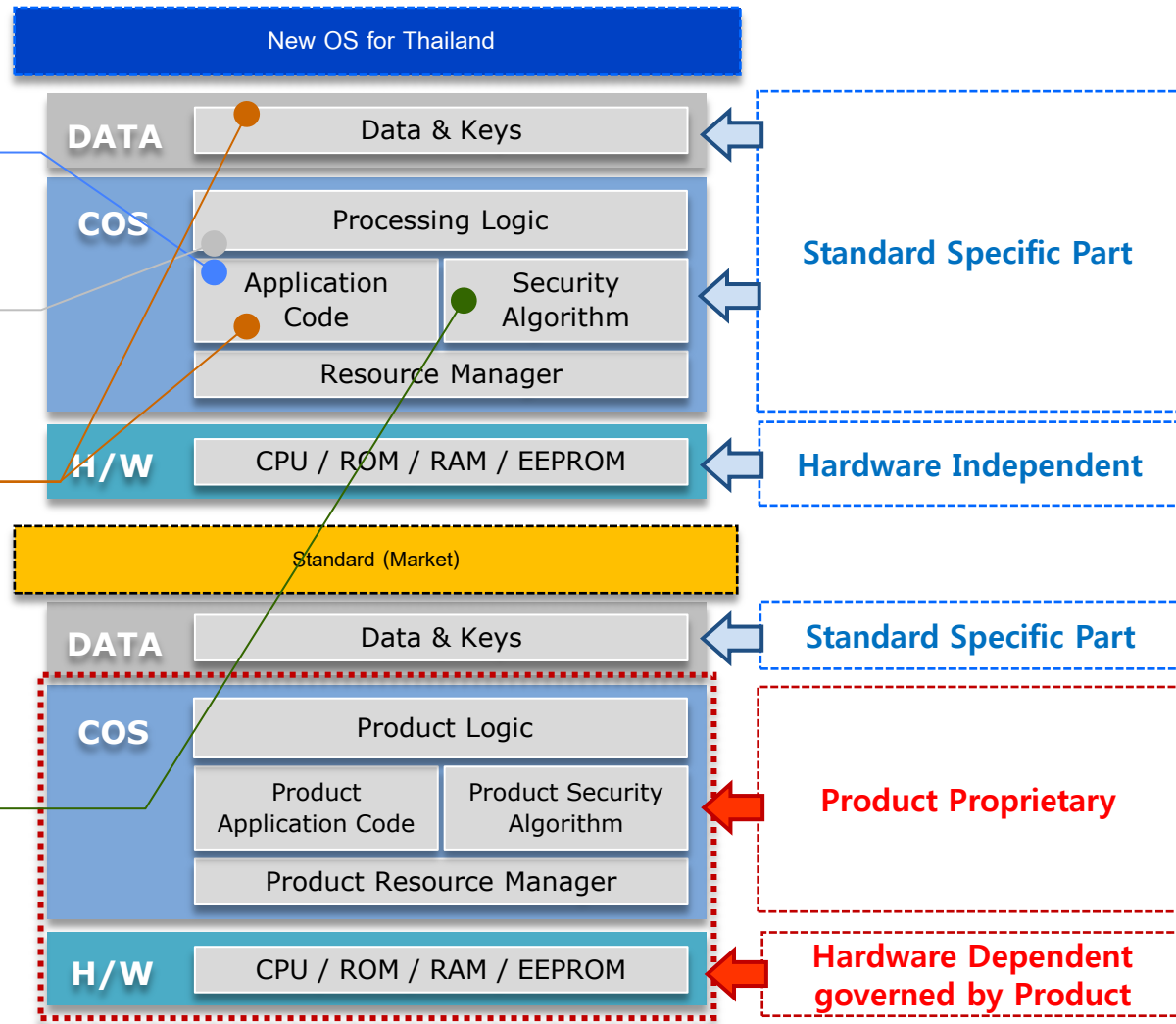
- Protocol definition for transaction process
 - command process order between card and sam
 - transaction processing with secure scheme

❖ Definition of File Structure & Elements

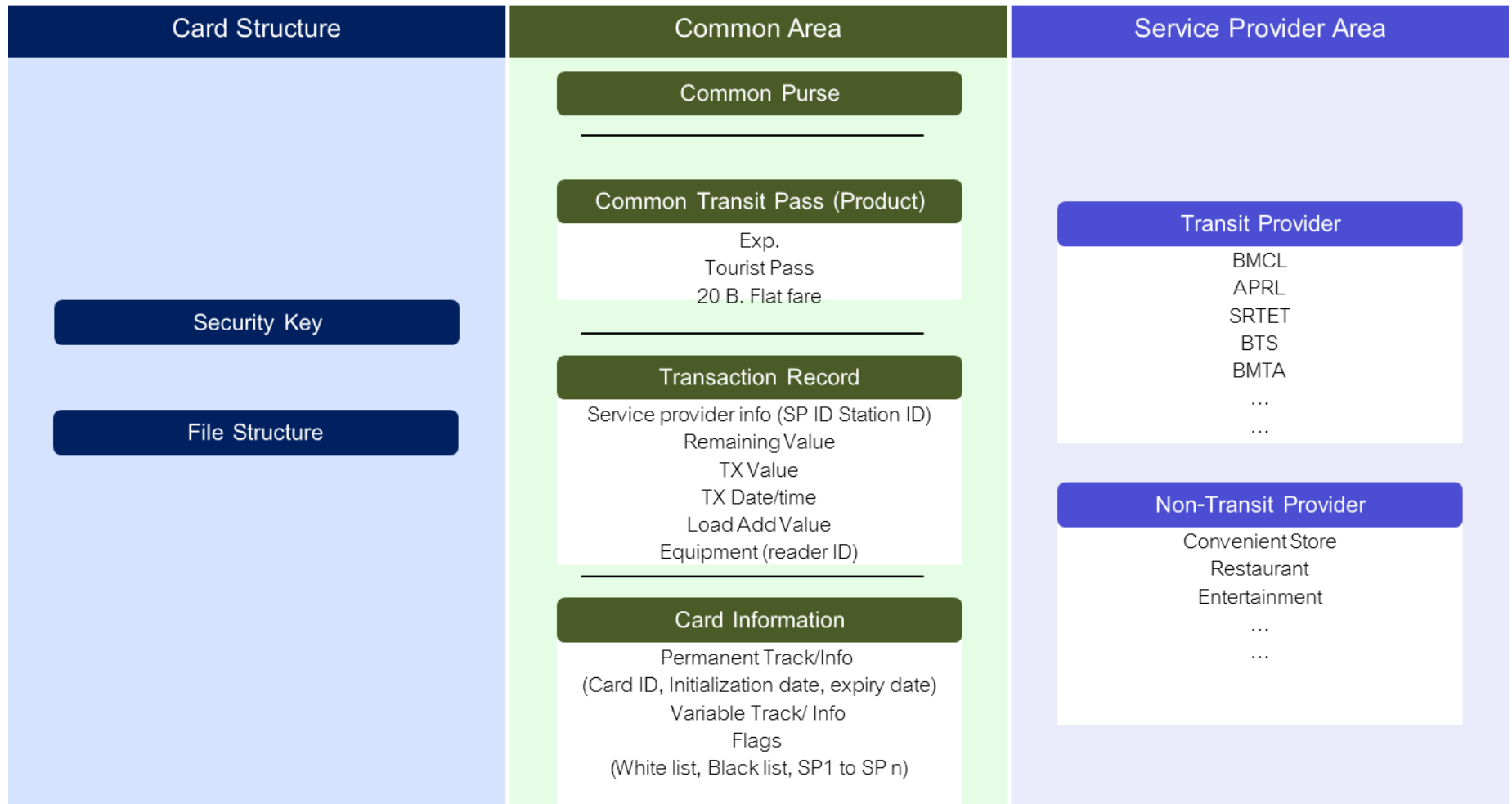
- definition of file to create and access condition and a way of referencing
 - File structure
 - reference way
 - access condition
- Data-related item definitions
 - Item, Size, Data Encoding Rule

❖ Definition of Security

- Card Secure Algorithm(Method, type, Key Length etc.)

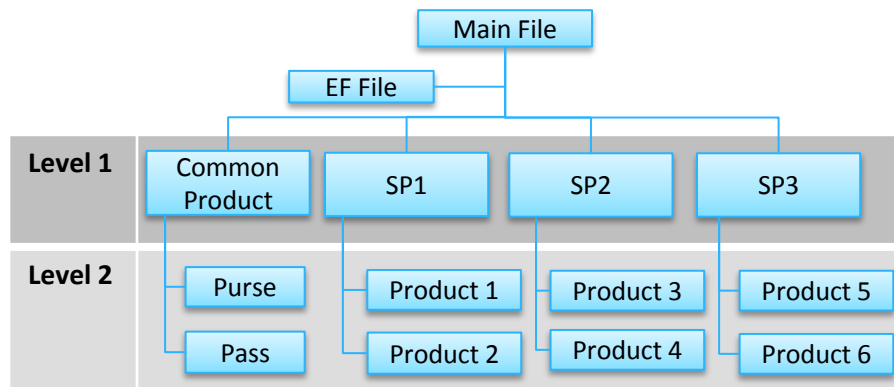


Card Structure Concept

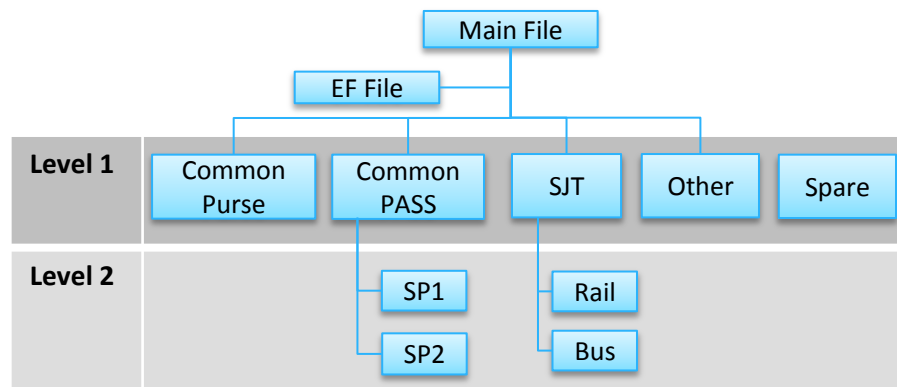


Card File Structure

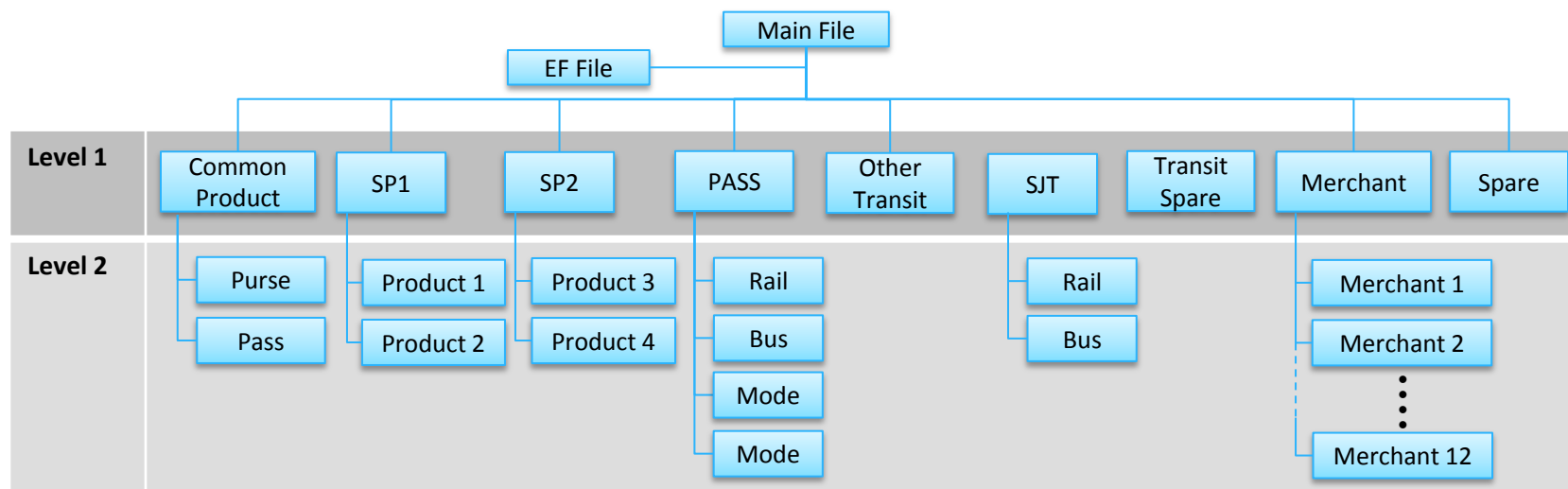
Option 1: Hong Kong









Option 2: Korea



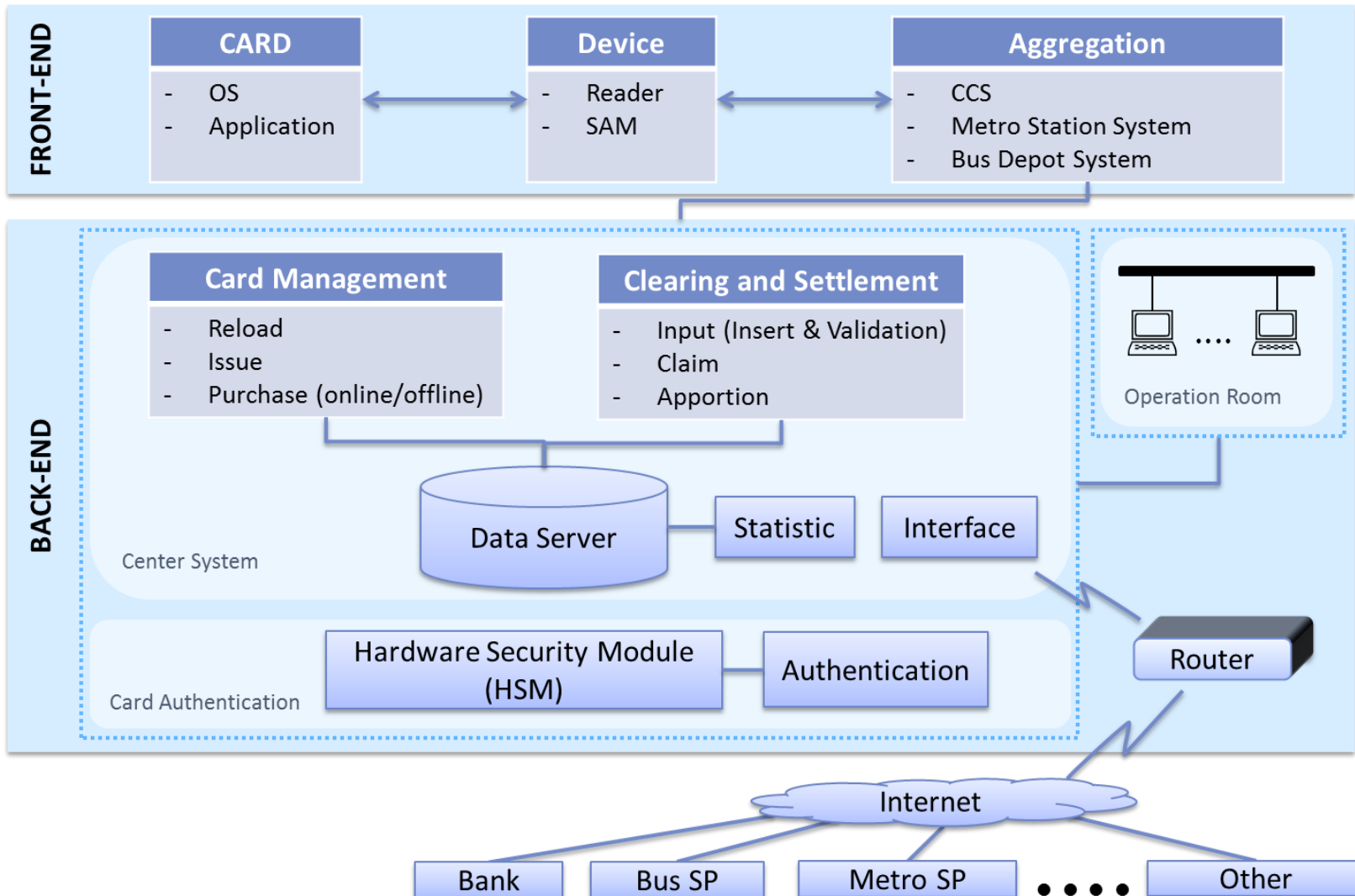
Option 3: Enhanced Design Combining Option 1+2



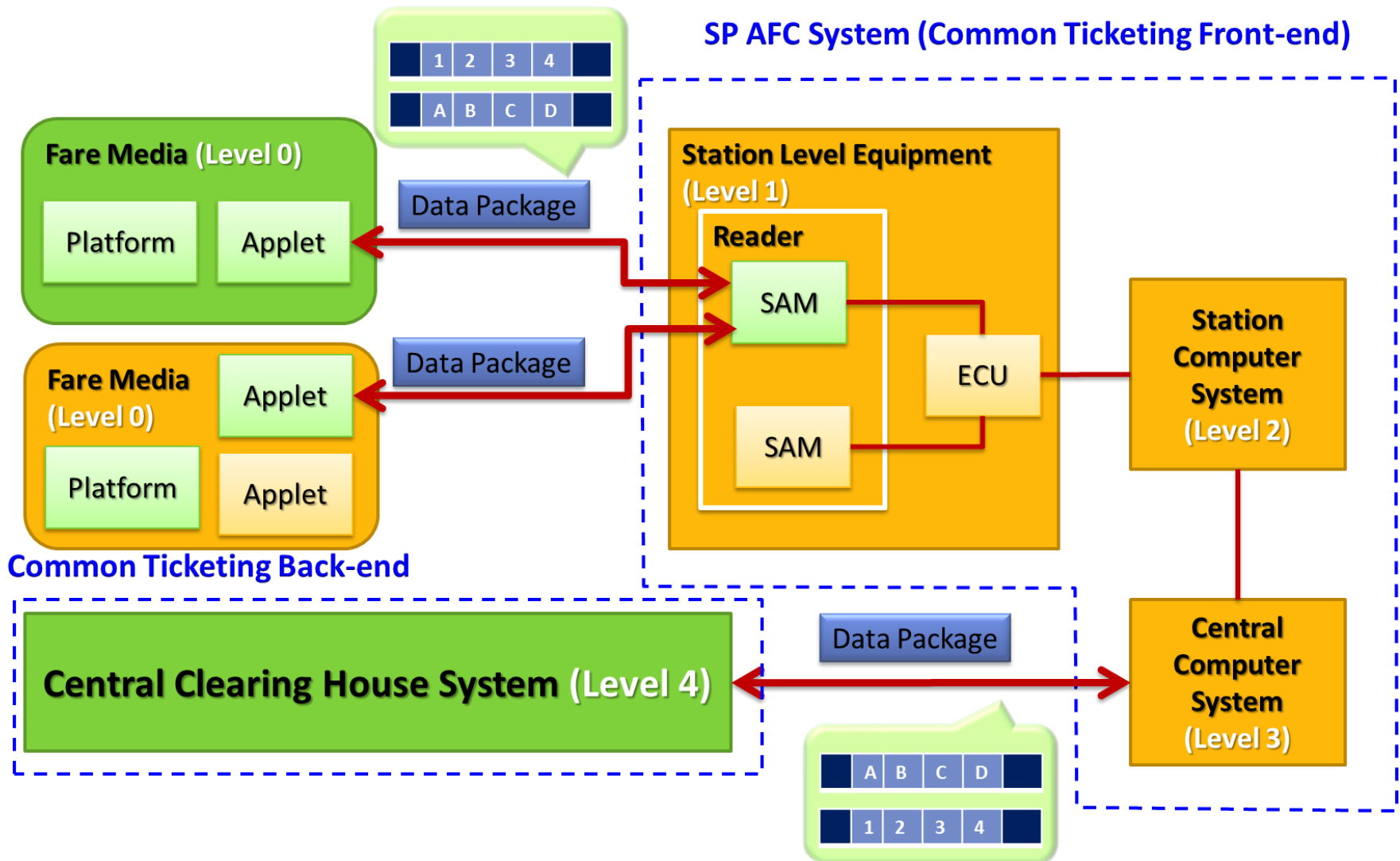
Current Fare Product

	NC Fare Product	Current Fare Product			
	NC	 	 		
SJT/ Cash	✗	✓	✓	✓	✓
SVT	✓	✓	✓	✓	✗
Intermodal (Discount upon transfer)	✓	✗	✗	✗	✗
Day Pass (1-day unlimited trip)	✓	✓	✓	✗	✓
Limited time/ Limited trip	✓	✓	✓	✗	✗
Fixed Journey	✓	✗	✗	✗	✗
Concession Card	✓	✓	✓	✓	✓

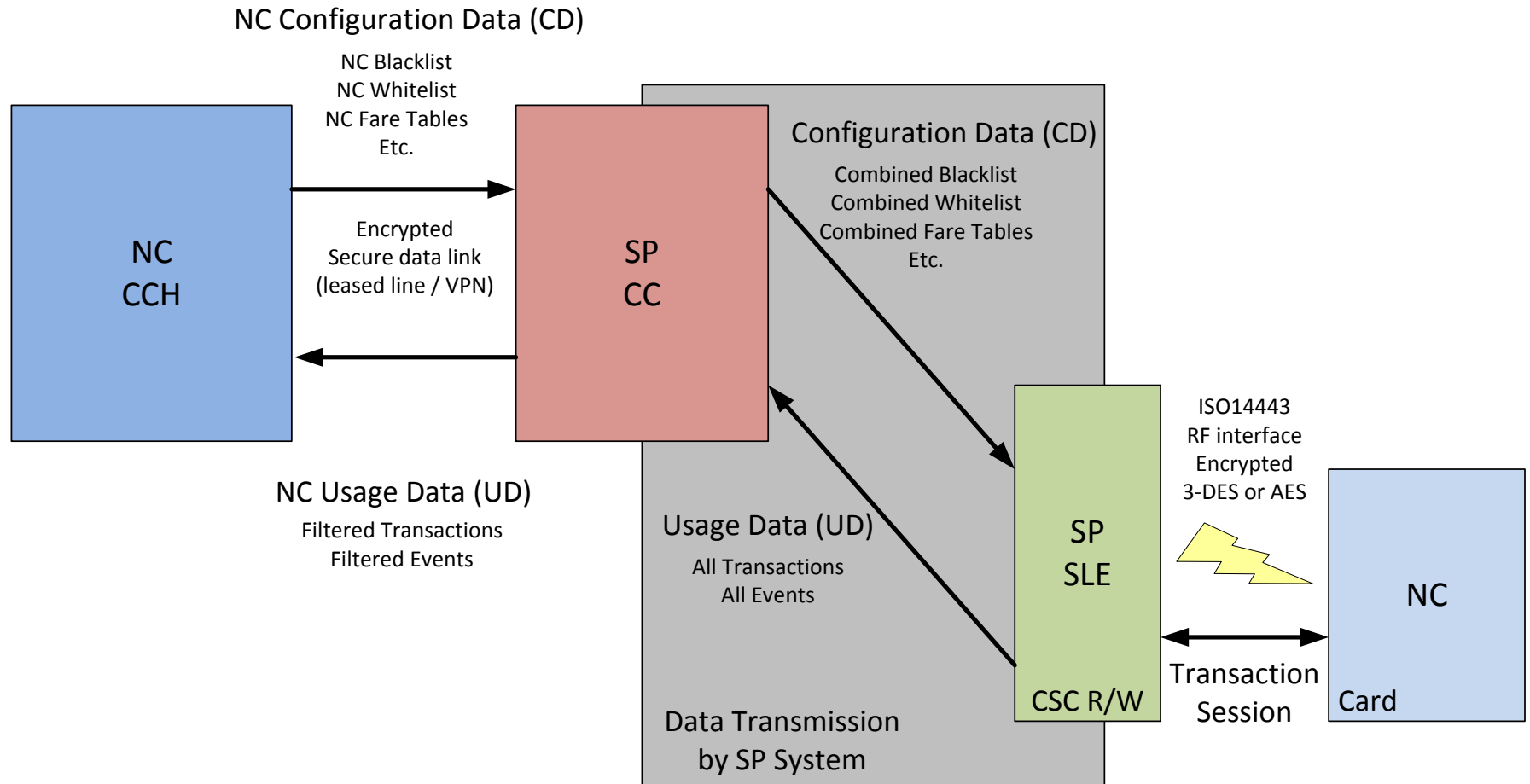
Over All Common Ticketing System



Interface Concept

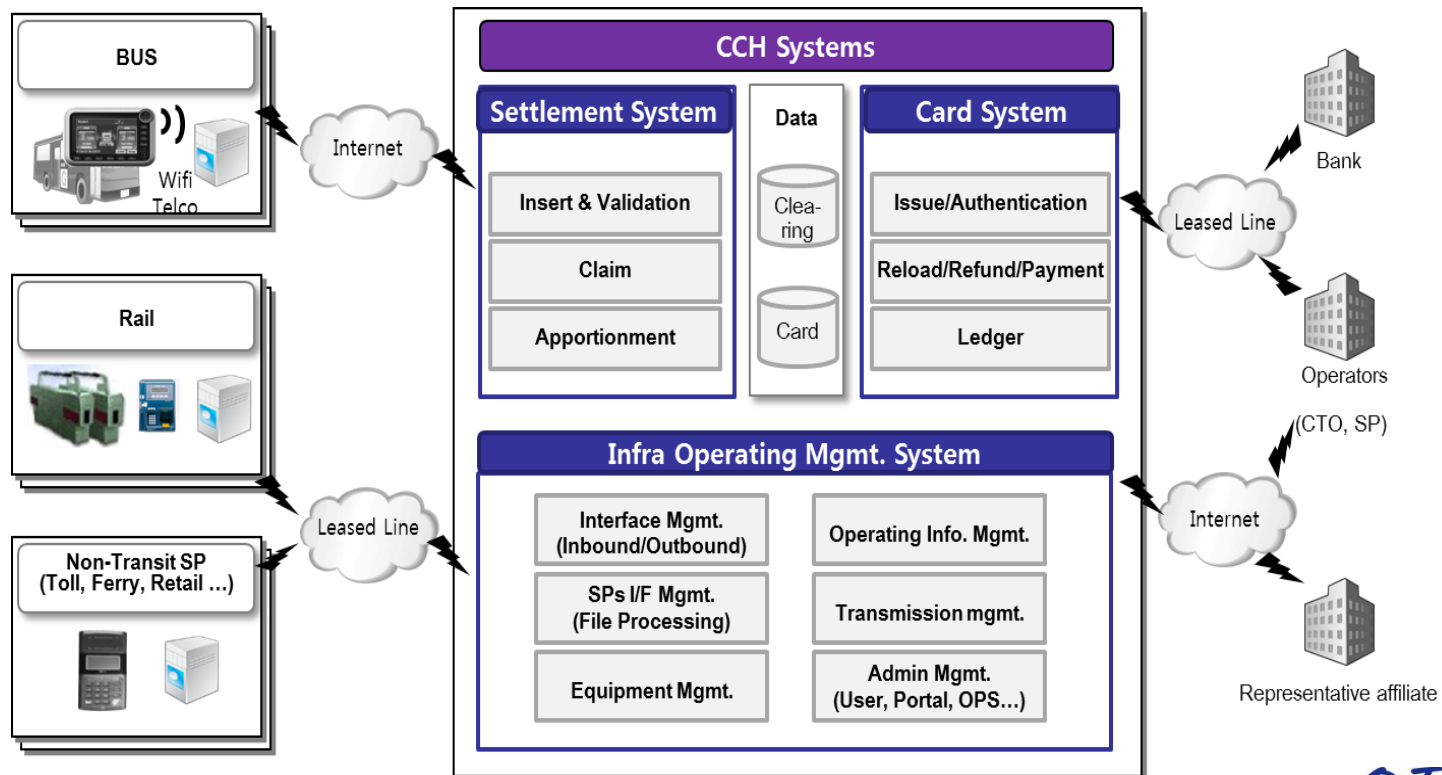


Simplified System Interfaces



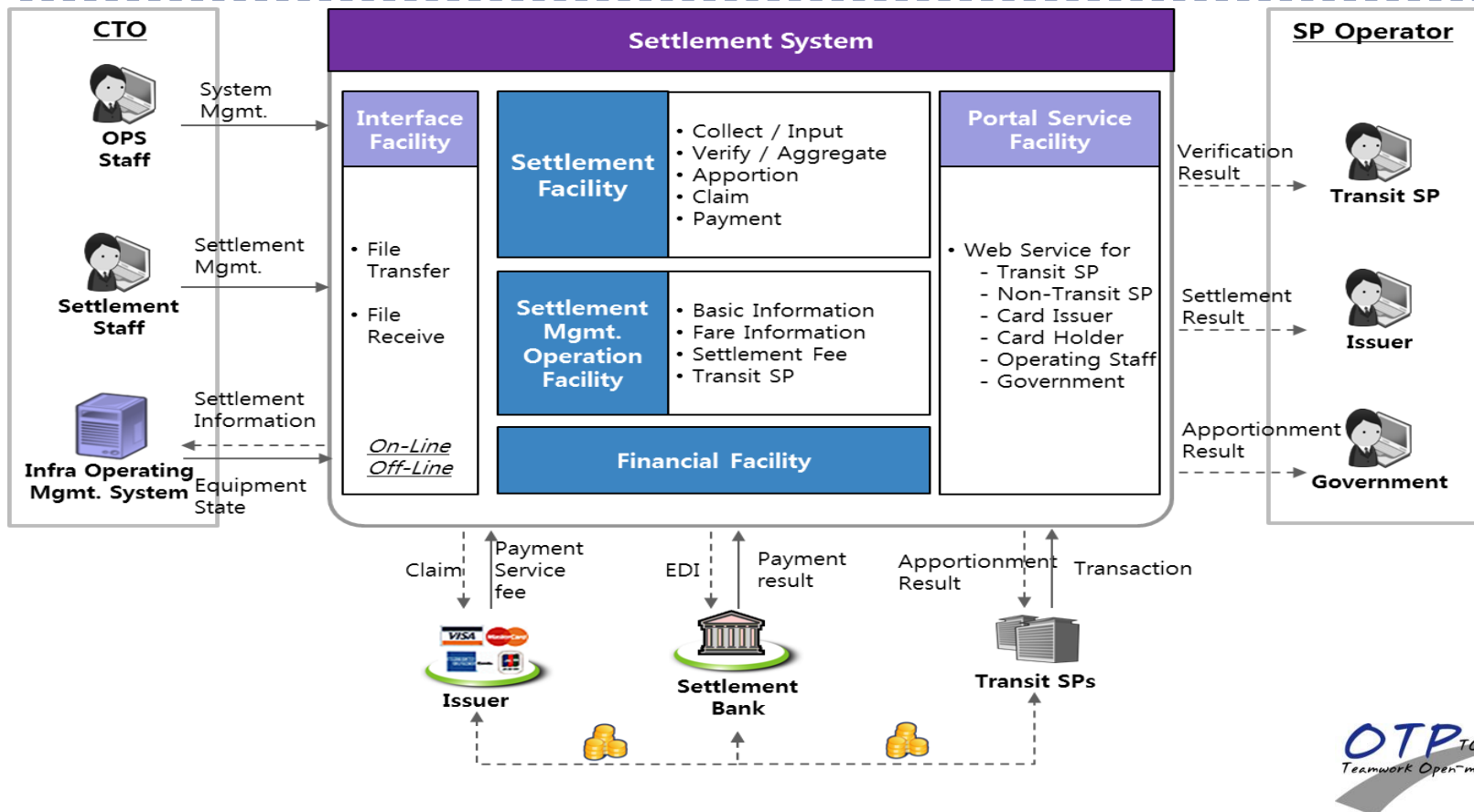
System Concept Description- Overall

The back-end system including the Central Clearing House (CCH) is comprised of Settlement System, Card Issuing & Management System and Infra Operating Management System. These three domains are the key components of the back-end system and are highly related to each other. This system will be formulized with H/W Architecture and Application S/W and Networks to form a common Ticket Back-End System.



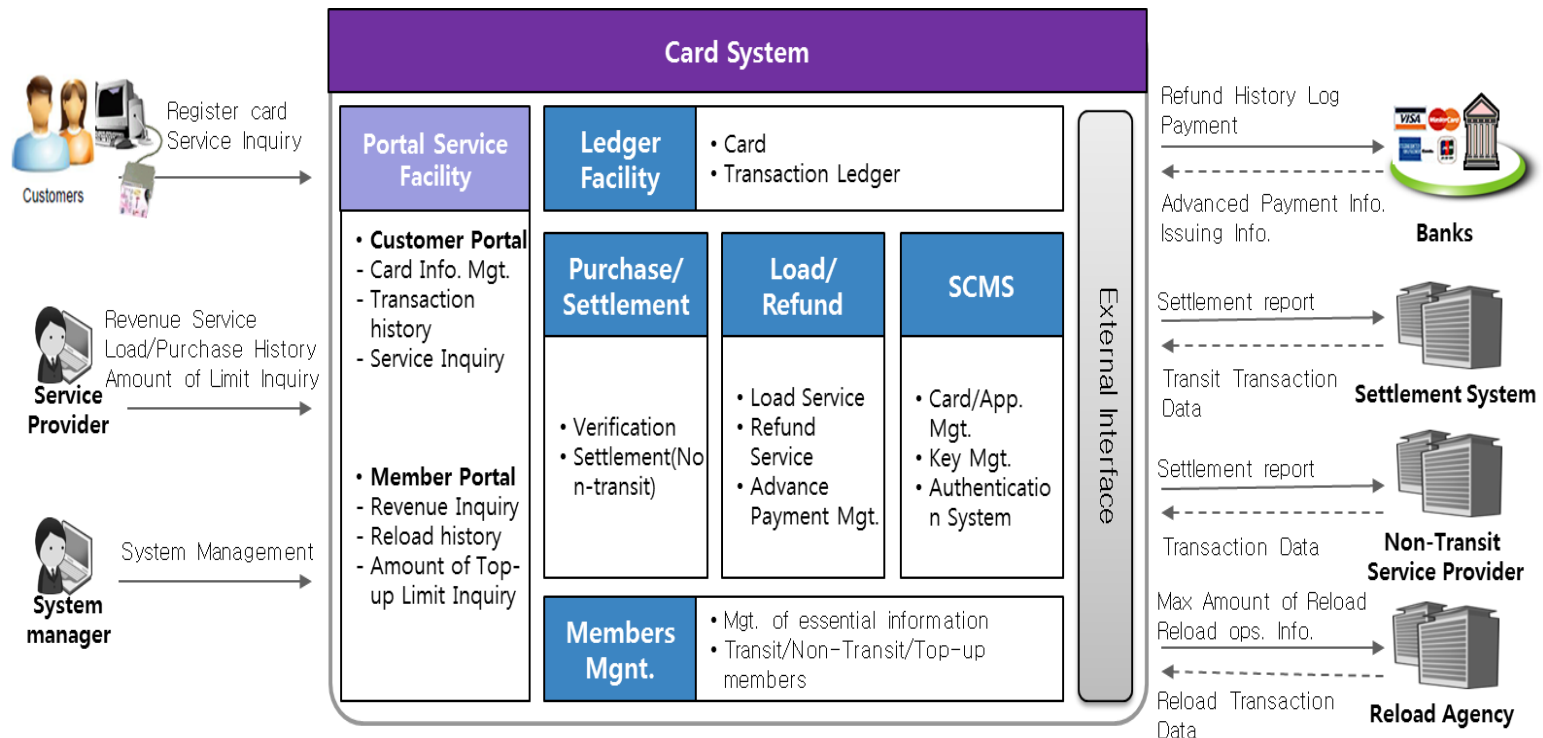
System Concept Description- Settlement System

Settlement system is comprised of Settlement Facility, Financial Facility, and Settlement Management Operating Facility. This system also will have a interface facility transmitting data in & out of Internal system or External System. Main Facility of this System is a settlement facility that will calculate how much to claim and how much to apportion to whom.

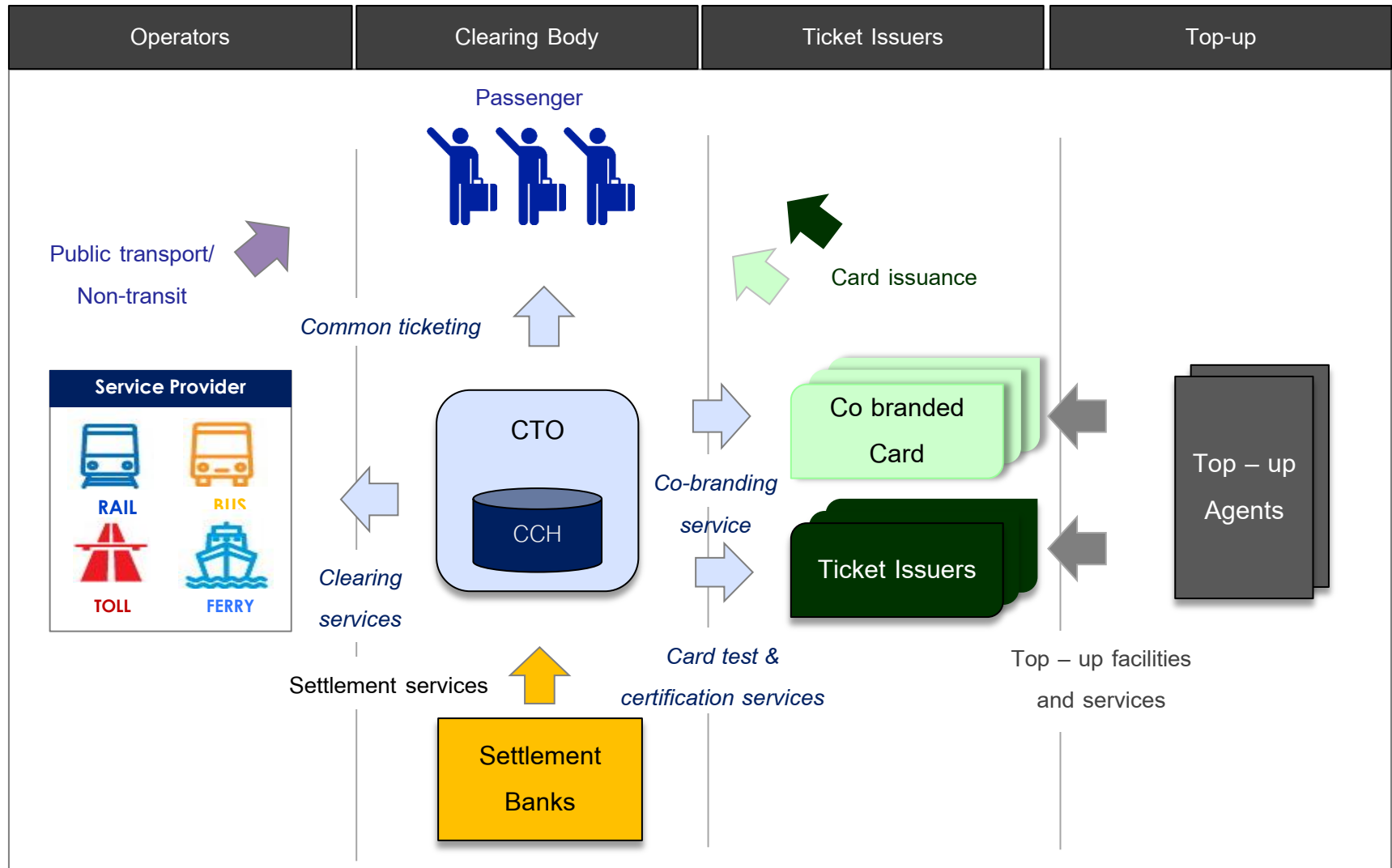


System Concept Description- Card System

Card System is the system that suggests the overall management of Card business as a NC Card issuer in a manner of effectiveness and robust. And this system will also provide most of service necessary for purchase and Reload as well as refund in non-transit and transit area. SCMS will be a Key component of management of Card Life Cycle as well as Key, which is also responsible for Authentication of transactions.

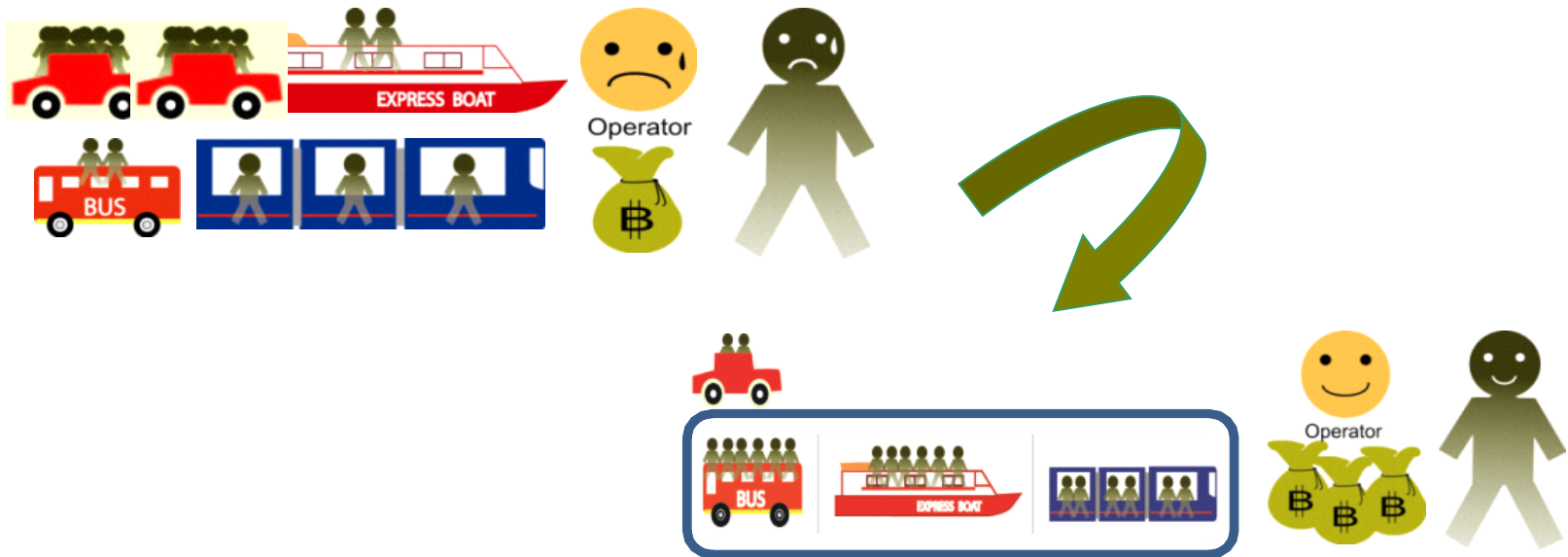


Functions of Common Ticketing



Question & Answer?

Present System



Common System

Thank You