

SETECS® Mobile Technologies
USA

SAFE™

Secure System
for Mobile Telecom Services



www.setecsmobile.com

Communication and SIM / UICC Chip Services

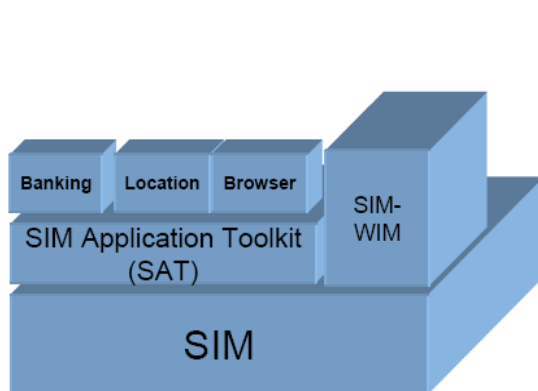
SAFE™ system provides technologies and products to mobile network operators to provide new, innovative, and highly profitable mobile communication and SIM / UICC chip services.

Communication Services

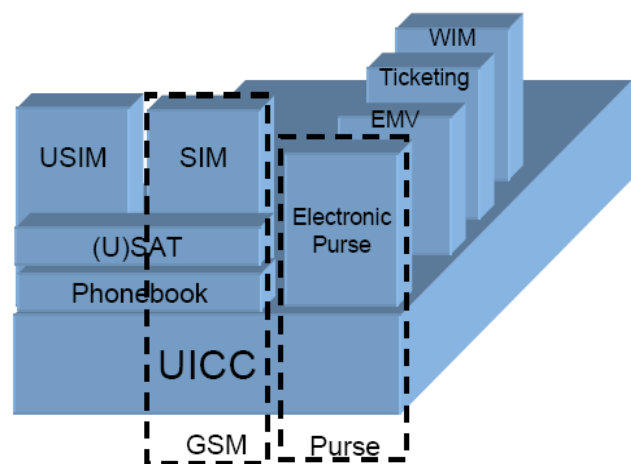
- **SMS Messages:** the system performs its transactions using SMS messages
- **3G/4G Data Transfers:** The system uses 3G / 4G data transfer (GPRS) services
- **USSD Menus:** the system can also use USSD selection messages for easier navigation through its services
- **Wireless Internet Messages (WIM):** the system can use WIM messages to assist users with selection and use of mobile services

SIM / UICC Chip Services

- **SIM, UICC, NFC chips:** the system supports distribution, provisioning, personalization and administration of data stored in SIM, UICC or NFC chips
- **Applets:** The system distributes, personalizes and updates applets stored in mobile phones



Current use of SIM chips – hard-coded and fixed application, mainly communications



New use of UICC chips – multi-application platform with dynamically loaded applets

Adopted from G. Lenhart, ETSI, "The Smart Card Platform", CENETEC Conference, April 2006

Business and Information Distribution Services

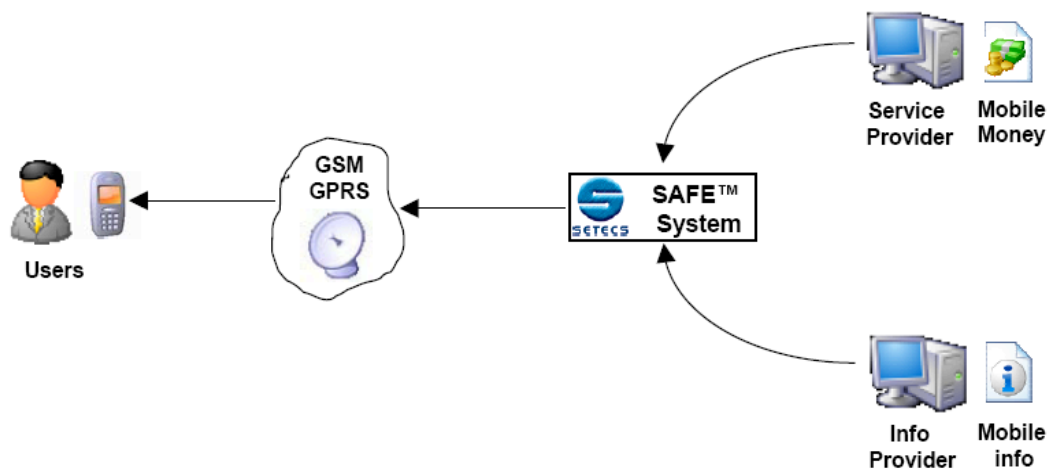
SAFE™ system supports various business transactions provided by multiple Service Providers and distribution – broadcasting of information, promotion, and marketing messages

Business Transactions

- **Mobile Payments:** the system supports various types of mobile payments – m-Banking, m-Accounts, m-Loans, m-Commerce,
- **Mobile Public Services:** The system supports distribution of government subsidies, charities, relief funds, and other public services transactions
- **Mobile Healthcare Services:** the system may be used by medical institutions and teams to collect and distribute medical data
- **Entertainment:** the system supports distribution and payments for games, ring-tones, etc.

Information Distribution

- **News:** news can be distributed to subscribers of such services
- **Stock information** may be distributed
- **Mobile marketing:** various coupons, m=discounts, prices, gift cards, and loyalty cards
- **Video clips:** photos and video clips may be distributed to friends and family



Near-Fields Communication (NFC) and Location-based Services (LBS)

SAFE™ system uses NFC and LBS technologies and therefore enables telecom operators to offer various new mobile services based on these two technologies

NFC Services

- **Mobile Payments:** payments can be performed using NFC chip in mobile phones and contactless PoS devices
- **Loyalty Programs:** The system keeps track of various memberships, transactions, bonuses and benefits
- **Mobile Gift Cards:** the system may be used by inquire, purchase, store, transfer and use various gift cards
- **Physical Access System:** mobile phones with NFC chips may be used as electronic key to enter rooms and other physical facilities

Location-based Services

- **Registration of locations:** businesses/merchants may register their locations in the system
- **Uploading discounts:** merchants may upload their discounts
- **Searching:** users may search for merchants and discounts based on locations
- **Download:** users may select, download, store in their mobile phones and later use various coupons, tickets and discounts based on selected location

