

**INTEC**

**INTEC DCP**  
DYNAMIC CHARGING PLATFORM

## **Enabling Roaming m-Commerce**

 **AePONA**

 **eBIZ.mobility**

## **Intec Case Study: Enabling Roaming m-Commerce**

### ***Making m-Commerce Ubiquitous***

The global uptake of m-Commerce services depends upon solving some key business challenges that are facing mobile operators:

- The capability to offer m-Commerce services to all mobile users, regardless of their roaming status; for example, offering local m-Commerce opportunities to in-bound roamers.
- The capability to offer m-Commerce across all payment options: prepaid, post-paid and now-paid.
- Gaining consumer confidence in m-Commerce services by focusing on ease of use, speed of use, and security.
- Providing a totally secure channel for real-time user authentication and authorisation of funds.
- Enabling faster inter-operator settlement than the usual telecoms timeframe of a month or more, thus mitigating the risk of fraud.
- Quickly building profitable business partner relationships by offering an open, secure and globally accepted content provider interface.
- Gaining an international network of m-commerce alliances with consistent pricing, without the restrictions of national banking schemes.

### ***The Technical Challenge***

The technical challenge centres on processing a roaming m-commerce transaction. That is, a mobile subscriber is not located in his home operator network, but rather has roamed to a visited network and attempts to purchase an item from a merchant in the visited network. The visited operator does not recognize the subscriber, and the home operator does not recognize the merchant. Additionally, it is likely the visited operator and the merchant demand payment in one currency, while the home operator and the subscriber denominate transactions in a different currency. A roaming m-commerce transaction is likely to be even further complicated by more parties requiring a fee for processing the transaction.

## ***The Road to Revenue with Intec, AePONA and eBIZ.mobility***

Intec Telecom Systems, in partnership with AePONA and eBIZ.mobility provides an m-commerce roaming solution set that address all of the above challenges, consisting of the following components:

- The **Dynamic Charging Platform (DCP)** from Intec
- The **Causeway OSA/Parlay Gateway** from AePONA
- The M-commerce **Roaming Mediation Gateway™ (RMG)** from eBIZ.mobility.

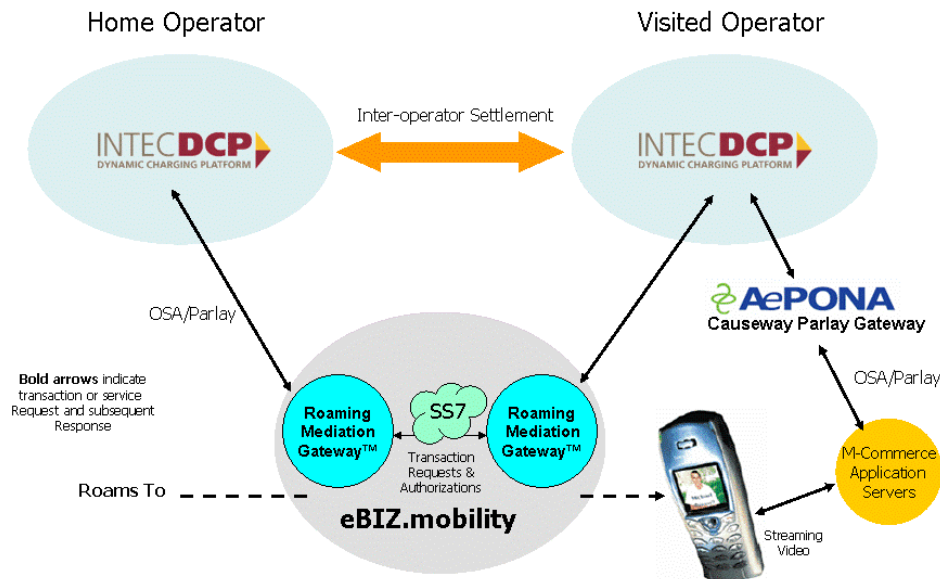
AePONA is the leading provider of Open Network Services solutions for global telecom operators. AePONA's OSA/Parlay based Causeway product suite delivers on the benefits of open standards by giving operators the power to manage their networks and applications within a standards-based, vendor-neutral framework. It allows operators to seamlessly plug and play new applications and services, irrespective of the underlying infrastructure. Causeway is already deployed in over 20 operator networks in Europe, Asia and the US, more than any other gateway vendor. It has proven interworking capability with more than 80% of global service and switching platforms and has achieved benchmark performance well in excess of market standards.

### **Solution Overview**

These three 'best of breed' components provide the following capabilities that together form a complete roaming m-commerce solution:

- An industry standard, open and secure interface for prepaid and post-paid m-Commerce Authentication, Authorisation and Accounting, based on the OSA/Parlay Charging standard mandated by the 3GPP.
- A security and service discovery framework in which m-commerce and content application partners can interface to the trusted telecommunications domain without putting the mobile operator at risk.

- Real-time active mediation that initiates m-commerce payment requests for roaming users towards their home network, and interfaces to existing BSS platforms for authorisation and account balance management.
- A completely secure, SS7 based roaming gateway that intelligently routes m-commerce payment requests between mobile operators and manages financial value conversion (e.g. currency exchange). The use of SS7 provides levels of security, resiliency and scalability over and above an IP based transport solution.



**™ M-commerce Roaming Mediation Gateway and Roaming Mediation Gateway are trademarks of eBIZ.mobility LTD**

## How it works

Consider the scenario in which a roaming user wishes to purchase a streaming video from an m-commerce partner of the visited network. The following steps occur in order to fulfil the transaction:

1. The user navigates to the visited operator's portal and requests a streaming video session hosted by a local partner.
2. The application has previously registered with the AePONA Causeway Parlay Gateway and sends a secure OSA/Parlay request for authorisation to the DCP resident in the roaming network. Here, the DCP acts as an OSA/Parlay Charging SCS (Service Capability Server).
3. DCP determines that this request is not associated with a home subscriber and so forwards the request to the local M-commerce Roaming Mediation Gateway (RMG) which determines the address of the home network.
4. Using this address the local RMG routes the m-Commerce transaction to the RMG in the home network over the public SS7 network in a totally secure manner. At this point real-time currency conversion may take place.
5. The home RMG then forwards this request to the home DCP for real-time user and funds authorisation, and sends a response back to visiting network via the original request path. This response could include information such as a final advice of charge in the user's home currency (and consistent with the user's price plan).
6. Once the streaming session has completed, the final balance update is then sent to the home network. In a prepaid scenario, this session may consist of several credit token reservations in the home prepaid platform (via the home DCP), prior to a final deduction upon session termination.

### ***Solution Benefits***

The joint Intec, AePONA and eBIZ.mobility solution helps mobile operators to develop new m-Commerce revenue streams by offering their users global content and commerce roaming capabilities in a virtual home environment. In addition, the use of the open OSA/Parlay standard enables operators to rapidly grow their m-Commerce partner base, as the focus can now be on the marketing value of the applications rather than costly proprietary systems integration.

The solution can help contribute to the widespread adoption of roaming m-Commerce, enabling mobile service providers to expand their international footprint and maintain hold of the increasingly complex mobile value chain.

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