VAS Experts ITG

PCEF Solution. Delivery of ISP’s marketing

Purpose for the Operator

Policy and Charging Enforcement Function is a DPI module that interacts with various operator systems within their standard interfaces in real time and executes specified policies based on DPI capabilities.

PCEF combines the concepts of TDF (Traffic Detection Function) 3GPP and ESB (Enterprise Service Bus).

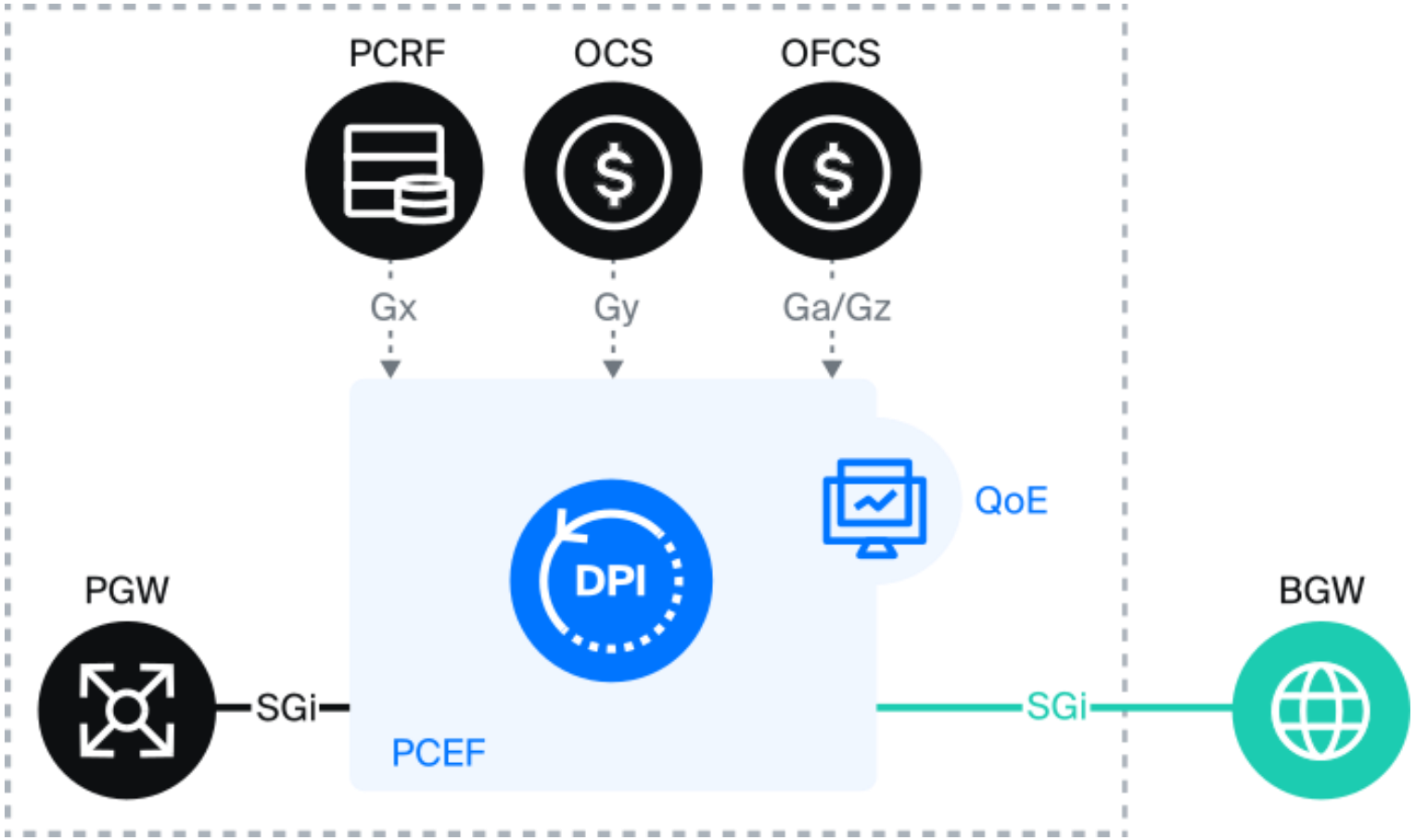
- Obtains policies for the subscriber
- Obtains traffic quotas for the subscriber, updates when exhausted
- Informs the operator about events in the subscriber's traffic
- Enriches subscriber data from other systems via API when executing some policies
- Adapts operator policies for execution on DPI, controls the execution

What the Subscriber gets

Flexible tariffs with only the necessary options and limits

- Application and service-based tariffs (messengers, video, music, etc.)
- Application prioritization
- Roaming management (anti-bill shock)
- Prepaid or postpaid tariffs
- Pay-as-you-go consumption model
- Traffic packages (quotas)
- Time-based policies (day/week/month)
- Traffic package sharing (multi-device, family and corporate tariffs)
- Bonus service packages.

PCEF Operating Scheme



Case Implementation. Available Now

Case 1	**Quota Control Module**	– Retrieves traffic quota for a subscriber and requests the next quota when needed. – Notifies about events for billing or policy synchronization. – Monitors performance on DPI (counting and disconnection).
Case 2	**Tethering Detection & UE Type Identification**	– Detects mobile hotspot usage. – Identifies device type (Phone/PC/IoT). – Blocks unauthorized access. – Notifies about events for billing or policy synchronization.
Case 3	**Application Traffic Management**	– Prioritization and blocking. – Application groups. – Quotas per application.

Case Implementation. Roadmap 2025

Case 4	**Roaming**	– Detection of international roaming – Event notification for billing or policy synchronization – Default traffic blocking
Case 5	**Subscriber Location**	– Region, base station – Event notification for billing or policy synchronization
Case 6	**Access Technology**	– UMTS/LTE/WiFi – Event notification for billing or policy synchronization
Case 7	**Quality of Experience**	– Notification of service issues for subscribers (VoIP, messaging, video, etc.)

Advantages of PCEF by VAS Experts

1. Implementation compliant with 3GPP specifications.
2. Multiple integration schemes with the operator.
3. Works with multiple DPI, PCRF, and OCS systems for load balancing and redundancy.
4. In-house development, customizable to meet client requirements.
5. Regular updates, including new features.
6. 24/7 technical support.

Thank you!

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