

Pharos Policy Engine

Policy and Charging Rules Function (PCRF)

About Pharos Policy Engine

Pharos Policy Engine (PPE) is a **PCRF** that enables you to deliver innovative, *differentiated mobile data services* with unmatched flexibility by enhancing existing network elements including your Packet Gateway (PGW), Online Charging System (OCS), and IP Multimedia Subsystem (IMS) core.

The system allows for *highly customisable* data services, with policies that manage network resources based on criteria like subscribers' data plans, locations, device types, APNs, and usage times. This granular control ensures services are optimised for each user.

A standout feature of PPE is its ability to create services without requiring an OCS. For example, it lets you create stand-alone Fair Usage Policies for Fixed Wireless Access.

To speed up deployment of mobile data services, PPE offers ready-to-use Application Service Modules, including geo-charging and customer-friendly zero-rated services. Explore the full range on page 3.

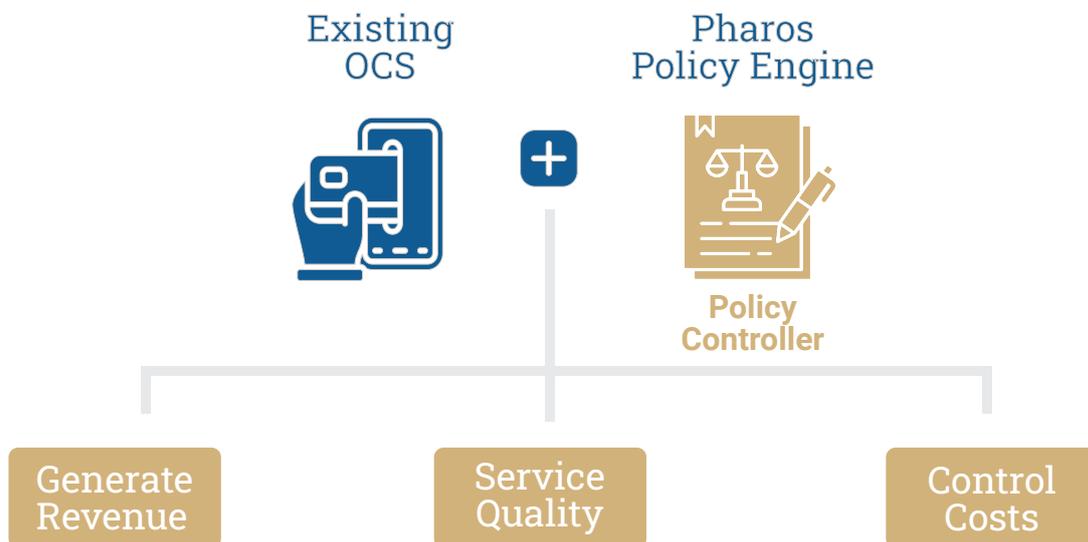
Additionally, PPE's multi-tenant capability lets you lease dedicated PCRF instances to wholesale partners. This eliminates their need for separate PCRF systems and creates new revenue streams while keeping your network under full control.

In summary, PPE is essential for delivering differentiated data services, managing network capacity, and unlocking monetisation opportunities.



Key Benefits

- ✓ Deploy policy-driven data services with or without OCS integration.
- ✓ Provide PCRF services for your wholesale partners.
- ✓ Generate revenue from ready-to-use mobile data services and monthly PCRF leases to wholesale partners.
- ✓ Boost customer retention by providing consistent Quality of Service and personalised offerings.
- ✓ Save operating costs by optimising network use with policy-enforced resource allocation.
- ✓ Secure your core mobile network from wholesale partners.



Functions of PPE

PPE is a crucial system for managing data traffic within the network. It is the central point in the network that controls and manages the flow of data traffic in real-time with policies that allocate network resources and cause differential service charges to be applied.

PPE is designed to deliver exceptional carrier-grade performance, scalability, and reliability. The field-proven system handles tens of millions of concurrent subscribers and scales to meet the growing demand for mobile internet access. It ensures 99.999% uptime through failover, load balancing, and redundancy mechanisms.

On top of this, the system helps you monetise your data network and is key to delivering quality services and controlling costs.

Generate Revenue

Generate additional income from ready-made Application Service Modules in these categories:

- 1 — **Differential Service-Charging**
Optimise your revenue with customised charging rules that apply varying rates based on each subscriber's profile, traffic types, and purchased products.
- 2 — **Flexible Product Offerings**
Achieve the agility and flexibility to create products based on market needs instead of products defined by technical limitations.
- 3 — **Bundled Data Services**
Offer bundled data products designed to promote the use of specific services that are most appealing to subscribers, ultimately leading to increased revenue.
- 4 — **Multi-Tenant**
Offer PCRF-as-a-Service to wholesale customers, lowering their entry costs and generating recurring revenue for your network.

Service Quality

Provide real-time data control to ensure subscribers receive paid-for service levels:

- 1 — **Make your Network Efficient**
Prioritise and allocate network resources effectively, based on subscribers' usage patterns, service plans, and triggers from other sources, such as the IMS core.
- 2 — **Quality of Service**
Set up data services with defined uplink and downlink bitrates. This allows you to create policies with rules that provide speed-based data packages and Fair Use Policies.
- 3 — **Customer Retention and Satisfaction**
Retain customers and increase customer satisfaction by offering differentiated services and advanced data bundle products.

Control Costs

A single PCRF system can manage policy control for multiple tenants and reduce network costs:

Multi-Tenant

PPE is a Multi-Tenant system that lets you run separate PCRF instances for each of your wholesale customers.

- 1 — **Zero-Rated Services**
Mitigate the risk associated with offering zero-rated services by implementing well-defined policies that govern their usage.
- 2 — **Fair Use Policy**
Ensure equitable and reasonable usage of data services by customers with or without an OCS.
- 3 — **Fair Use Policy**

VoLTE Guaranteed Bitrates

Offer guaranteed high-quality voice calling services on your LTE network. VoLTE allows mobile originated and mobile terminated voice calls to be placed using the packet data network.

Speed-, Time-, Priority-Based Services

Set the line speed to specific uplink—downlink bitrates, offer time-of-day usage to monetise unused network capacity by charging different rates for each bitrate product that you offer.

Social Bundles

Define which social networks to sell to subscribers as bundled products. This provides subscribers with cost-effective access to social media platforms and enhances their network experience.

Fair Usage Policies

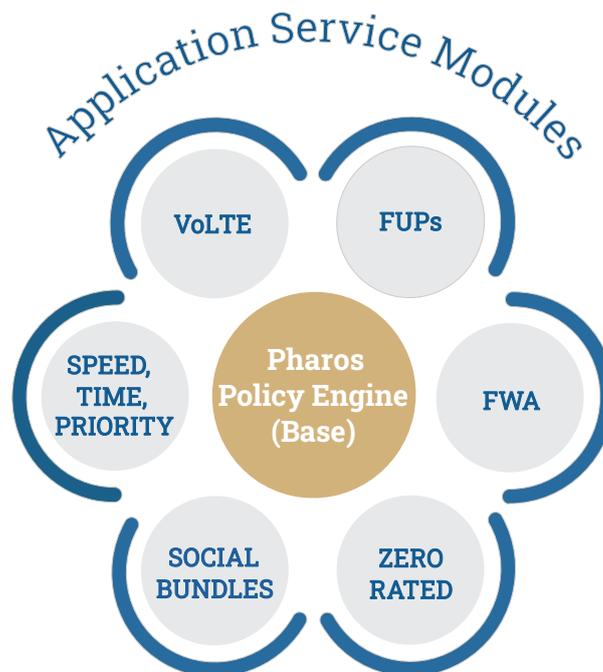
Create and enforce Fair Usage Policies for uncapped subscribers. Doing so ensures equitable distribution of your network resources, prevents network abuse, and maintains a consistent quality of service for all users.

Fixed Wireless Access

Provide subscribers with a fantastic service experience through automatic service activations and reactivations, personalised communications, and no service interruptions when entering and exiting their geofences.

Zero-Rated Services

Provide subscribers with free access to apps, websites, and streaming services. Doing so enhances subscriber satisfaction. Also protect data revenue by capping free data usage within set limits.



Why Pharos?

Our formula for your success:

- ✓ We craft fully functional solutions to address technical challenges using people with deep knowledge of multiple technologies.
- ✓ We use our vast telecom expertise to distill complex requirements and technologies into effective solutions.

Telco Expertise

Since 1997, we have been actively engaged in the telecom industry, acquiring extensive expertise and knowledge in telco networks and technologies.

History Of Innovation

Our history reflects a strong record of delivering innovative solutions through our mature technology framework, custom-tailored to meet the specific needs of our customers.

CONTACT

Please visit us at pharos-corp.com

Phone (South Africa)
+27 (0)11 475 1022
{8:00–17:00, GMT+2}

E-mail
info@pharos-corp.com

In-House Technology

We believe technology should support business needs. With a broad technology portfolio and industry experience, we craft solutions tailored to your requirements.