CERTINEXT · TELECOMMUNICATIONS · WEST AFRICA

A Mobile Network Operator in West Africa Eliminates Manual Certificate Tracking and Reduces Network Maintenance Windows with eMudhra CertiNext

SECTOR	REGION	SOLUTION
Telecommunications	West Africa	CertiNext

CLIENT OVERVIEW

The organisation is a mobile network operator in West Africa providing voice, data, and mobile money services to approximately 6 million subscribers. The operator runs a distributed infrastructure including base station controllers, core network elements, a mobile money platform, and customer-facing digital channels. The IT and network teams collectively manage a certificate estate that spans operational technology, billing infrastructure, and internet-facing services.

THE CHALLENGE

The operator's certificate management relied on a spreadsheet maintained by the IT team, supplemented by occasional reminders from the vendor that had supplied the core network management platform. Certificates on the mobile money platform — which processed customer payments and transfers — were considered business-critical but had no more formal tracking than any other certificate in the estate. When a certificate on the mobile money API expired, the platform was unavailable for around three hours during morning peak usage, affecting customers trying to pay bills and make transfers. The incident generated social media complaints and was covered by a technology news outlet. An internal review also found that the core network management system had a certificate within 14 days of expiry that no one had flagged — and that the process to renew it would require a maintenance window.

> *"Three hours of mobile money downtime during the morning rush, covered on social media and in the tech press. Certificate management moved from a background IT task to a board agenda item that same week."*
>
> **Chief Information Officer**

THE SOLUTION

eMudhra deployed CertiNext across the operator's full certificate estate — covering the mobile money platform, core network management system, billing infrastructure, and customer digital channels. A discovery scan identified 245 certificates, including the near-expiry network management certificate that was renewed as an emergency action before the scheduled maintenance window became unavoidable. Mobile money and core network certificates were classified as Priority 1, with renewal workflows triggered at 120 days and direct CIO notification at the 45-day mark. Certificates on customer digital channels were Priority 2 with 90-day renewal triggers. An integration was built with the operator's change management process, so that renewal activities for network-critical certificates were automatically registered as planned change requests — avoiding the need for emergency maintenance windows. A private CA was deployed for internal network management and billing system certificates.

RESULTS

The near-expiry network management certificate was renewed without requiring an emergency maintenance window. In the 18 months since deployment, the operator has had no mobile money or customer digital channel incidents caused by certificate expiry. Planned certificate renewals are now registered through the change management process rather than discovered as emergencies.

METRIC	BEFORE	AFTER
Mobile money platform availability	3-hour outage; social media and press coverage	Zero cert-related outages in 18 months
Network cert emergency actions	14-day window cert found with no plan	All renewals via planned change requests
Certificate estate visibility	245 certificates; spreadsheet tracking	All 245 in CertiNext with priority tiers
Priority 1 cert renewal lead time	Reactive; no advance process	120-day trigger; CIO notified at 45 days
Board visibility of cert risk	Not on board agenda; unmanaged	Cert posture included in quarterly IT risk report

About eMudhra. eMudhra is a globally trusted provider of digital trust services, offering eSignatures, PKI, Certificate Lifecycle Management, Multi-Factor Authentication and Identity & Access Management solutions. Licensed by the Controller of Certifying Authorities (CCA), India, eMudhra serves 1,000+ enterprises across 40+ countries, helping organisations build secure, compliant and paperless digital ecosystems.

Customer name withheld for confidentiality.