

## CALLING LINE IDENTIFICATION (CLI) SERVICES

Defne CLI Services provide operators a **solution for fraudulent calls** by detecting and preventing fake calls in a mobile terminating way by utilizing Intelligent Networks.

These days, almost everyone who has a phone is affected by the rise in unsolicited calls. Even more disturbing are the calls in which scammers attempt to target or mislead people while disguising their identities by spoofing or changing the caller ID. To provide a better customer experience by analyzing and blocking the fraud calls, Mobile Network Operators need to utilize Fraud detection & blocking services. Defne CLI can distinguish between legitimate and unauthorised traffic, block scam calls and prevent Spoofing and Robocalling.

To determine whether to prevent a call or not, examination is made within the operator first, by considering Network, Provisioning and Fraud integration points by Defne CLI. If the calling number is a subscriber of another operator within the country, examination is continued by querying the Central CLI solution to get the service subscription information of the subscriber to determine whether to allow or prevent the call and prevention is provided by Defne CLI if necessary.

### Feature set:

- The analysis of calls that overlap and ring repeatedly from the same numbers
- Identification of fake caller ID
- Blacklist supervision
- Validation of number ranges
- Detection of fraud calls & blocking those calls

**Defne CLI is Kubernetes orchestrated and has Cloud-native architecture. So it comes along with reduced development and release timeframes, optimized costs, increased software scalability and availability, flexibility in multi-cloud environments, and migration from an on-premises environment to hybrid cloud is possible.**



## USE CASES

### Blocking calls that exceed the predetermined number

The maximum number of calls that can be made from the same number towards a subscriber per day can be determined by regulators and exceeded calls are prevented.

### Blocking calls with invalid Caller IDs.

If there is no caller ID or the caller ID is alphanumeric, incoming calls from domestic and international numbers will be disconnected.

### Blocking calls with missing Caller ID.

According to the different caller ID lengths, contents, etc., calls can be cleared. For MO calls, MT calls, and interconnect calls, this feature shall be applicable. When determining whether the caller ID is present or absent, the number of digits for the number types specified in the Numbering Regulation are taken into consideration.

### Blocking calls of subscribers who have barring services

If the customer has blocking service (barring of all outgoing calls), all calls will be terminated.

### Blocking calls originated from blacklisted numbers

For domestic calls, determination of 'whether the subscriber is blacklisted across the nation or not' is made through Fraud identification. If the subscriber number is in FRAUD lists, the call will be terminated. Fraud number list can be updated manually with GUI interface and by script via standard interfaces like Rest API. Database also contains lists of SERVICE numbers (i.e white lists).

### Blocking fraud calls coming from inland

Network examination is required for roaming status check with the purpose of detecting calls made by the subscribers who pretend to be inland but are actually abroad. By Provisioning examination, a certain set of subscriber registrations are checked such as early call forwarding settings and IMS/TAS registrations. Calls that are initiated in the served operator's country where the subscriber is actually in roaming will be canceled except those conditions.

### Blocking calls if there is no such subscriber in the served operator

All calls will be canceled if there is no such subscriber in the served operator. Defne CLI checks following to determine this:

- Existence of number portability status information.
- Porting status of the numbers within the served operator's number range (ie. 9054X).

### Blocking fraud calls coming from abroad (International interconnects incoming calls)

When a call is coming from abroad, Network examination is required for roaming status check with the purpose of detecting calls made by subscribers who pretend to be abroad but are actually inland.

### Blocking calls of subscribers whose number is not aligned with the numbering plan

If the subscriber number does not match the numbering plan, all calls will be terminated.

### Blocking frequent calls & Fraudulent Call Detection capabilities

Defne CLI finds out calling numbers that are making frequent calls. For instance, a list of the phone numbers that place more than "x" calls in an hour can be retrieved. These kinds of quantities create statistics and alarms. Regulators in the nation can then review these numbers and, if necessary, add them to the list of fraud numbers.

### Blocking calls of personally blacklisted numbers for each subscriber

### Blocking outgoing calls of subscribers who have no voice subscription

If the customer has no voice (telephony service, TII) subscriptions, all calls will be terminated.

## Defne CLI's unique criterias to block calls are listed below:

- Fraud calls coming from abroad (International interconnects incoming calls)
- Fraud calls coming from inland
- Frequent calls
- Calls coming from personally blacklisted numbers of each subscriber
- Calls of subscribers who have barring services
- Outgoing calls of subscribers who have no voice subscription
- Calls of subscribers whose number is not aligned with the numbering plan
- Calls if there is no such subscriber in the served operator
- Calls with invalid caller ID.

## The perks of utilizing CLI Service

### Prevents Voice Fraud



- Monitoring incoming and outgoing calls in accordance with carrier policies can be used as validation procedures for call fraud schemes.

### Blocks Connections in Real-time



- To find potential fraud, our technology checks pre-made watch lists against each call. The solution can block the caller and notify the fraud team if a fraudster is found.

### Lowers Company Expenses



- Voice fraud is a serious and expanding issue for the telecom sector. A business might quickly lose thousands to millions of dollars due to a single fraud incident.

### Minimizes Conflicts with Service Providers



- One of the most prominent inter-carrier fraud cases is voice fraud, which must be exposed with the help of timely information. Monitoring of incoming calls, particularly the path they took to enter the network.

### Enhances the Customer Experience



- People are being attacked by criminals from all sides, even their phones. The ultimate impact on voice customer experience is fraud and spam.

**Defne Telekomünikasyon AŞ,**

headquartered in Istanbul, Turkey, established in 1996, is a leading global provider of telecom solutions, software products, and services for communications networks. Defne's solutions enable network operators and service providers to monetize every potential connection beyond limits while enhancing the subscriber experience.

Backed up with professional and managed services, Defne offers solutions in call completion, messaging, value added services and roaming business lines of telco. Expertise in IN, IVR, and messaging combined with a wealth of skilled resources, allows Defne to provide reliable and scalable solutions that seamlessly integrate with existing customer infrastructure.



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