

# IoT SECURITY

With our global network capabilities and more than 20 years of experience in the field of empowering connections, we are your global operator of access for the connection of things.

iBASIS Global Access for Things is a global mobile connectivity and network level data analysis solution for things worldwide. We are leading the industry in the use of next generation eSIM/eUICC technology to provide a single global, remotely programmable, SIM that provides mobile data connectivity to your smart devices all over the world.

## THE iBASIS SECURITY APPROACH

The emergence of the Internet of Things (IoT) enables mobile devices, sensors, machines and vehicles to connect to each other and to the Internet. New types of service providers are being created rapidly to offer innovative services and solutions, which involve chip, sensor and device manufacturers, application developers, communication (mobile and fixed) providers, and Internet, Public and Private Cloud service providers, etc. In this new ecosystem, each element from an end-to-end perspective faces a variety of security and privacy challenges as well as the risk of all sort of attacks from Internet. To ensure that end-to-end security can be maintained, each stakeholder needs to address the risks and challenges in the design stage in conjunction with other related stakeholders under an end-to-end security framework. Since almost all IoT services are required to leverage a communication network (e.g. mobile networks), the GSM Association (GSMA) which represents the telecommunication industry, has created a set of security guidelines to help achieve the end-to-end security that benefits the whole ecosystem.



## KEY BENEFITS

Remotely programmable mobile network solution

Standards based eSIM/eUICC and Remote SIM Provisioning (RSP) technology

Single eSIM solution to eliminate mobile connectivity logistic issues

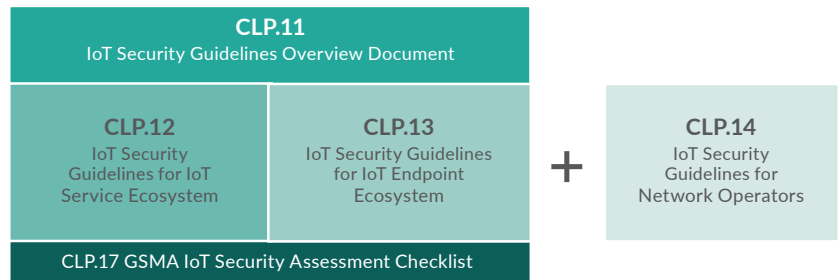
Open programmable and flexible with API interface at all levels

## BE THERE FIRST

Looking for a customized solution?  
Talk to one of our specialists  
at [info@iBASIS.net](mailto:info@iBASIS.net).

The structure of the GSMA security guideline document set is shown below:

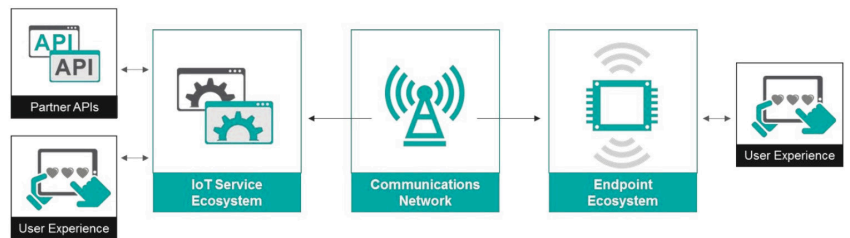
*Network Operators, IoT Service Providers and other partners in the IoT ecosystem are advised to read GSMA document CLP.14 "IoT Security Guidelines for Network Operators" which provides top-level security guidelines for Network Operators who intend to provide services to IoT Service Providers to ensure system security and data privacy.*



The guideline for each of the components is based on the following generic IoT Model.

iBASIS Global Access for Things, is one of the innovative IoT services created recently to offer cellular based data access service for IoT devices. To learn more, simply visit [iot.ibasis.com](http://iot.ibasis.com).

The iBASIS IoT service architecture is comprised of APIs, IoT data services, and Communication Network components according to the generic IoT model above. Therefore, our security framework addresses the security challenges reflected in CLP.11, CLP.12, and CLP.14. The following summarizes iBASIS' IoT security approach and extra security services offered to customers for their end IoT devices.



## SECURITY CONNECTIVITY:

- Each IoT device is connected through the iBASIS secure IPX network Infrastructure which is GSMA security compliant
- Each service element facing the Internet is protected by a firewall and a Distributed Denial of Service (DDoS) protection system
- VPN to Private Cloud or Enterprise Premise is available

## DATA AND APPLICATION:

- API with mutual-authentication and encryption
- Data Anomaly Detection for each accessed IoT device and Policy-Based

## SECURITY SERVICE:

- On-demand data access control per IoT device to limited IP destinations
- On-demand location based access control per IoT device
- Device ID change Alert and policy based actions per customer
- Threat and behavioral analysis pertaining to customer defined IoT devices
- eSIM based end-to-end encryption with API Tool for App Integration

## ABOUT iBASIS

iBASIS is the leading communications solutions provider enabling operators and digital players worldwide to perform and transform. Powered by Tofane Global, iBASIS is the first independent communications specialist, ranking third largest global wholesale voice operator and Top 3 LTE IPX vendor with 700+ LTE destinations. iBASIS today serves 1,000+ customers across 18 offices worldwide.

## CORPORATE HEADQUARTERS

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