





# The eIDAS Opportunity

Driving transparence, interoperability and innovation across the European Union with eIDAS

#### Delivering on the eIDAS vision

eIDAS (electronic IDentification, Authentication and trust Services) is an EU regulation (EU N°910/2014) on electronic identification and trust services for electronic transactions across the European Union. It was adopted in 2014, took effect in 2016 and provides a predictable regulatory environment to enable secure and seamless electronic interactions between businesses, citizens and public authorities across the digital European single market.

By creating standards for electronic signatures, digital certificates and other proof for authentication mechanisms, eIDAS's aim is to spur growth within the EU. The benefits of eIDAS are many, but there are two core concepts that the regulation will impact:

Interoperability - member states are required under eIDAS to create a common framework that will recognize eIDs from other member states, while ensuring its authenticity and security. This is key in allowing citizens and companies to easily do business across borders.

Transparency - eIDAS provides a clear and accessible list of trusted services that may be used within the centralized signing framework. This allows security stakeholders to engage in dialogue about the best technologies and tools for securing digital signatures for the whole European single market.

## Becoming a Trust Service Provider

The eIDAS regulation has created an internal market area for trust services within Europe. Trust service providers (TSPs) are the companies or organizations that provide third-party trust services in the form of certificate issuance, signatures and authentication. The eIDAS regulation specifies the requirements that any public TSP operating within the EU must meet, thus ensuring that the entire EU is operating under the same set of standards for certificate trustworthiness. eIDAS also introduces the concept of a qualification for TSPs, where all TSPs across the EU must adhere to some basic requirements which are audited periodically at least every 24 months.

As of today, not all standards regarding eIDAS compliance for TSPs are finalized. However, the European Telecommunications Standards Institute (ETSI) and the European Committee for Standardization (CEN) have developed a set of standards and guidelines that organizations must meet in order to become a TSP.

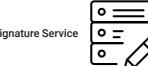
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## The PrimeKey solutions

for the eIDAS services











Certificate Issuing Service



Validation Authority Service

## elDAS - A modern toolbox of trust needs a tailormade product

There are a number of building blocks required to build an eIDAS TSP solution. Depending on the service and market segment, different kinds of core functions are needed. To provide a solid and long-lasting solution it is absolutely necessary that all individual components are working smoothly and seamlessly together. The list below gives an overview of the products that PrimeKey delivers to build a TSP service:

#### Certificate Issuing Service

PrimeKey PKI Appliance delivers the most comprehensive solution to fulfill the eIDAS requirements. Based on EJBCA Enterprise plus High Availability features and a built in Hardware Security Module, the PrimeKey PKI Appliance delivers a complete eIDAS CA solution.

### **RA Service**

Registration in combination with supported authentication features is the most complex and adaptable part in an eIDAS setup. With PrimeKey PKI Appliance we deliver the ultimate level of freedom for you to implement your own service directly inside the PKI solution. With the built in Virtual Machine option we offer our customers space inside the PKI environment.

#### **Validation Authority**

One building block of trust for a TSP is a high performance and accessible Validation Service. PrimeKey Validation Authority (VA) Appliance offers a comprehensive OCSP / CRL Server. With a built in high availability and clustering feature, the VA Appliance fits perfectly into the eIDAS TSP environment.

#### Signature and Time Stamping Services

By providing services around signature generation, eIDAS cleans up the patchwork of different national regulations and directives. An EU-wide common framework for signature generation\* will enable new business and use cases. PrimeKey SignSever provides the signing engine in a TSP infrastructure. Since SignServer provides a wide range of signature formats and time stamping, it fits well into a variety of use cases.

\*This part is still under development, due to the fact that there are currently no certified HSM according to Protection profile EN 419221-5 available.

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## **About PrimeKey**

leading companies for PKI solutions. PrimeKey has developed successful solutions, such as EJBCA Enterprise, SignServer Enterprise and PrimeKey PKI Appliance. PrimeKey is a pioneer in open source security software that provides businesses and organisations around the world with the ability to implement security solutions such as e-ID, e-Passports, authentication, digital signatures, unified digital identities and validation. PrimeKey has its head office in Stockholm, Sweden.

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