OSCI A Common Communications Standard for E-Government

Frank Steimke and Martin Hagen

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OSCI is the name of a two-layered protocol for the secure exchange of messages in the E-Government context. It has been developed within the German MEDIA@Komm project [4], and now it became an important part of the German E-Government infrastructure. It will, for example, be a major part of the secure technical infrastructure for Bund Online 2005, which is the E-Government program of the German federal government. The security layer of OSCI, called OSCI-Transport, is a mandatory standard in the federal governments IT - architecture program SAGA [1]. It is part of the European IDA program, too.

With OSCI, governments and municipal institutions are able to use the internet for a secure, confidential and reliable communication. OSCI is based on international standards, especially XML, and is well suited for o ering common government services over the Internet in a secure way. It supports asynchronous (E-mail like) message exchange as well as request - response scenarios. The application-layer of the OSCI protocol is used for the standardized representation of content data. Together with the underlying secure transport layer, this allows highly automated transactions, which are especially useful in the government-to-government scenarios.

OSCI is up and running. In the city of Bremen, Germany, there are more than 100 applications online which are based on OSCI. They are available at http://www.bremer-online-service.de. Federal laws are in preparation, which will lay down the use of OSCI for the G2G communication between all the civil registration o ces in Germany. This will be mandatory from 2005, and is expected to save more than 3 Mio Euro each year.

There are two distinct layers in OSCI:

- OSCI-Transport is the application independent part of OSCI. All of the cryptographic functions are defined in OSCI-Transport, which is used for the secure, reliable and traceable transport of content data of any kind.
- The real advantages of electronic transactions will come to e ect in highly automated processes. To achieve this, the content data has to be structured in a standardized way. This allows legacy systems to read and process the customers data.

In OSCI, this standardization of content data takes place at the application layer. There are several projects dealing with content data from di erent applications. The most popular is called OSCI-XMeld. It its used in processes for the registration of citizens.

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