

# AC026 - Secure Electronic Marketplace for Europe

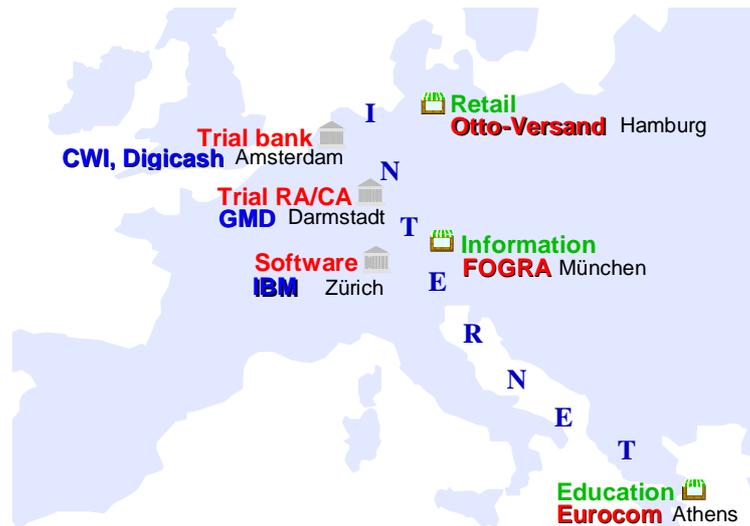


*SEMPER* aims at providing an open and comprehensive approach for building the global secure electronic marketplace.

*SEMPER* is developing a generic architecture for secure electronic commerce over networks, in particular over the Internet.

*SEMPER* architecture is independent of specific hardware and software platforms and of network architectures. The most fundamental electronic commerce services, such as secure offering, ordering, payment and information delivery, have been developed and integrated.

Commerzbank AG  
Cryptomathic  
Centrum voor Wiskunde en Informatica (CWI)  
DigiCash  
EUROCOM EXPERTISE  
Europay International  
FINTEL sprl  
FOGRA Forschungsgesellschaft Druck e.V.  
France-Télécom - CNET  
GMD Forschungszentrum Informationstechnik GmbH  
IBM France  
IBM Zurich Research Laboratory  
INTRACOM  
KPN Research Netherlands  
Otto-Versand  
r3 security engineering ag  
REGIONLINK SC  
Sintef Telecom  
System Synthesis Limited  
Universität Dortmund  
Universität Freiburg  
Universität Hildesheim  
Universität Saarbrücken



SEMPER Trial Sites

## Trials Objectives

The *SEMPER* Trials enhance the existing service offerings of Otto-Versand (catalogue retailing), FOGRA (consulting), EUROCOM (multi-media courses), and a series of small and medium-size enterprises from various sectors of activity in Europe.

The trials are primarily based on the Internet and the Web environment. Three series of trials are planned:

- The Basic Trial is designed for an in-depth evaluation of the *SEMPER* architecture and the functionality of *SEMPER* basic services. It is primarily technology-oriented, but will also provide an evaluation of the consumer response.
- The SME Trial brings *SEMPER* basic services to SMEs in Europe to evaluate SMEs and consumer responses.
- The Enhanced Trial is intended to evaluate *SEMPER* enhanced services (e.g., notary services, privacy support) and refine consumer response.

## Trials Description

The service providers have established Web pages, serving as their electronic front-shops. Their offers are based on product catalogs stored either as flat files or relational databases.

Customers can obtain product and service information via the Internet. They can place orders by means of forms designed by the service providers. Orders can be reviewed before confirmation. Cancellation of part or all of the order can occur at any time prior to confirmation.

For the Basic Trial, payment is available as a simulation only (i.e., no real money flows). For the SME Trial as well as for the Enhanced Trial, real payment will be possible through credit card, on the basis of the SET protocol, and through electronic money, based on ecash™.

Delivery occurs off-line for physical goods, and on-line for information. In case of on-line delivery, a proof of delivery to the customer is made available.

Certification is handled by a Registration and Certification Authority (RA/CA). Customers receive with the *SEMPER* software

a passphrase that they need to obtain their digital certificate from the RA/CA.

The participants to the Basic Trial were selected by the service providers. Close contacts with these participants throughout the trial, based on help desks, and afterwards with follow-up surveys is expected to provide valuable first hand information on user requirements for electronic commerce.

## Platforms

Four different types of platforms are used for the Basic Trial. They are Windows/95, Windows/NT, Unix, and MacIntosh.

## Operating Sites

Three service providers are participating in the Basic and Enhanced Trials. In Germany, Otto-Versand offers a mail order service for physical goods, from Hamburg, and Fogra provides consulting services to the printing industry, from München. In Greece, Eurocom offers distance education services from Athens.

In addition, for the SME Trial, SMEs distributed throughout Europe will provide services in various sectors. The actual sites are currently under definition.

From Amsterdam, CWI and Digicash will provide virtual "banking" facilities for use by the participants to store their funds, until real payments can be achieved with actual bank support.

In Darmstadt (Germany), GMD will act as the Registration and Certification Authority (RA/CA) for all parties taking part in the trials.

From Zürich (Switzerland), IBM will distribute the *SEMPER* software. The code will be signed.

## Calendar

The Basic Trial is planned to start end in April 1997 for duration of two months minimum.

The SME Trial and the Enhanced Trial are both planned to start in September, also for a duration of two months minimum.

## Related experiments

There may be additional trials of the *SEMPER* prototype conducted outside the project. Such trials will need to be arranged on a per case basis.

More information on *SEMPER* is available on the World Wide Web, at:

<<http://www.semper.org>>