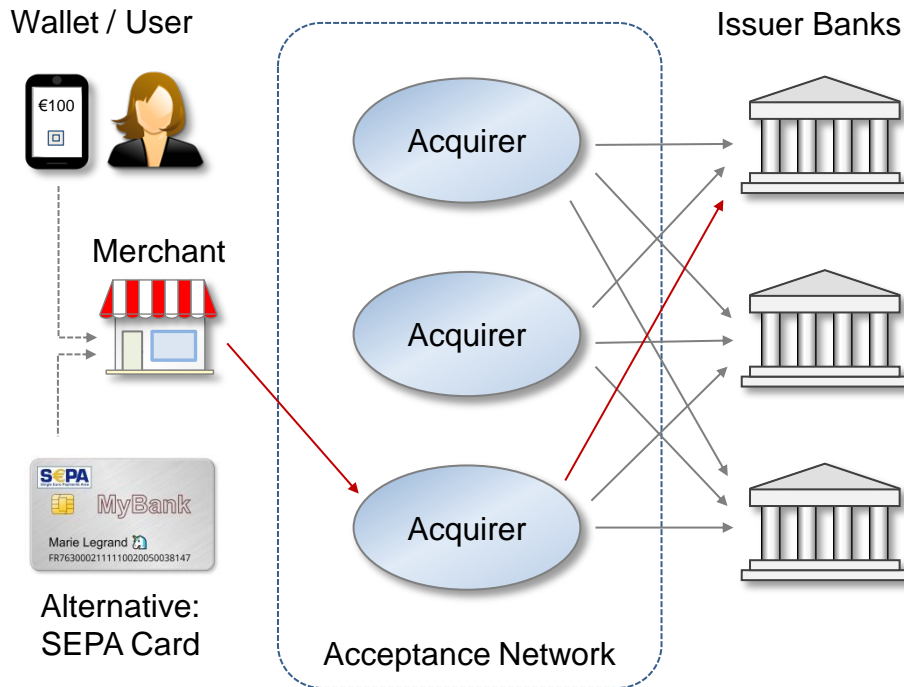


Presumed EPI “Front-end” Architecture

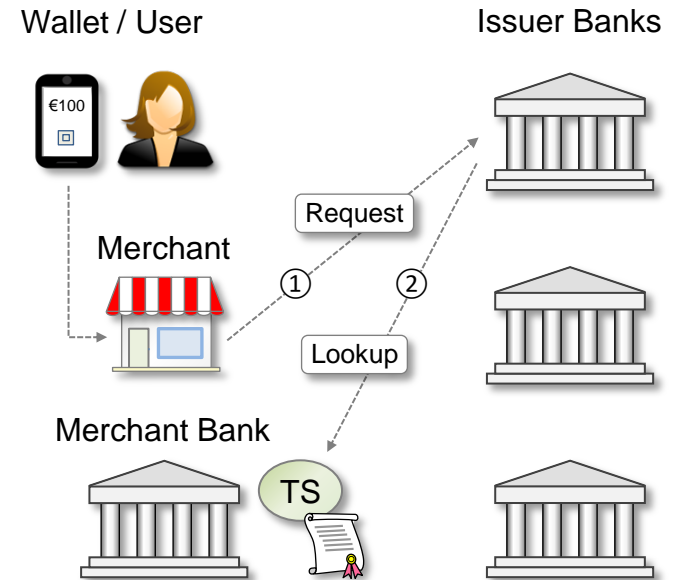


In the traditional architecture for card-based authorizations, a Merchant is connected an Acquirer which handles the communication with the Issuer Banks. The Acquirer is the entity that usually has the business agreement with a Merchant as well.

The traditional architecture depends on a *huge number of statically configured security parameters and paths*, illustrated by the arrows in the diagram.

The traditional architecture also depends on *databases* holding card-number to Issuer Bank “routing” tables.

Acquirer services are covered by *additional fees* on top of the fees required by the Banks running the payment scheme like SEPA Inst.



In the [Saturn](#) architecture a Merchant has a business agreement with their account-holding Bank which also provides a simple *public trust service* (TS). TS vouches for the Merchant’s validity including their claimed account number.

The data provided by a TS is *digitally signed* by the Merchant Bank and is thus to be trusted by all Banks sharing a specific payment schema like SEPA Inst.

Security with respect to requests (1) is maintained through *mutually signed digital contracts* resulting from the Merchant and User authorization step, combined with TS lookups (2).

The arrows in the diagram are *transient*, there is no need for externally configured security or path information.

The actual payment business remains in the hands of the *fully decentralized network* of Banks running a specific payment scheme.