


Saturn - Wallet Using Credit Transfer

Saturn is an enhanced mobile “Wallet” and associated infrastructure enabling users *authorizing* a wide range of payment related events. One of the objectives of Saturn was providing a *credible challenger* (<https://cyberphone.github.io/doc/saturn/saturn-vs-applepay.pdf>) to Apple’s and Google’s products through an *innovative use of CT (Credit Transfer) operations*. Although technically and politically quite challenging, this is well aligned with recent developments like SEPA “SCT Inst” and UK’s “Faster Payments”. The following is an attempt describing why there *may* be reasons for banks considering Saturn like schemes *in addition* to the mandatory support for PSD2.

Parameter		PSD2 API ("typical")	Comment
Scope	Payments	Financial Services (Including Payments)	In spite of providing functionality exceeding card payments, the tightly scoped design still makes Saturn comparatively simple.
Payment scenarios	Mobile Web, POS, Gas Station, ATM, QR, etc.	Web only	Saturn supports all common usage scenarios for payment cards as well as the mobile Web.
Payment types	Direct, Reservation, Subscription, Gas Station, <i>Refund</i> , etc.	Direct only	PC/Mac based Web payments are supported using the QR code mode.
CT compatibility	Any	Dedicated	By <i>separating</i> authorization by the <i>payer</i> from the actual payment system, the Saturn “Wallet” is virtually independent of underpinning payment “rails”.
Credit card support	Yes	None	
PISP dependency	None	Yes	Due to the streamlined Saturn authorization scheme, there is no need for PISPs at all. <i>Third party hosting</i> of multiple Merchants is still possible.
GDPR considerations	None	?	Saturn does not leak any PII (Personal Identifiable Information) to Merchants.
Payment credential enrollment	Yes	None?	Saturn in similarity to Apple and Google counterparts depends on cryptographic keys and card images for representing payment credentials.
Payment provider selection	None	Merchant specific	Saturn’s virtual card scheme (<i>from a user point of view</i>), appear like classical payment cards which usually do not require you to specify account numbers, bank, or dealing with awkward OTP tokens.
Account selection	Unified	Bank specific	
Transaction display	Unified	Bank specific	
User authorization	Unified	Bank specific	The <i>integrated</i> Saturn payment terminal concept takes <i>security</i> , <i>UX</i> , and <i>accessibility</i> to new levels.

That an API developed for a specific purpose does not automatically translate well to a quite different (*and in most current PSD API specifications not even mentioned*), purpose is not entirely surprising. In fact, isn’t it pretty much *always* like that?