

# e-Receipts – Invention Disclosure

1. When a *User* clicks a “Pay” button or swipes their phone, the *Merchant* activates the *User*’s payment **Wallet** with a *payment request* message including a *randomized receiptUrl*.

```
{  
  "paymentRequest": {  
    "commonName": "Space Shop",  
    "amount": "550.00",  
    "currency": "EUR",  
    "referenceId": "20231007"  
  },  
  "receiptUrl": "https://spaceshop.com/receipts/20231007j5lOEL2w9cWBFUwkbrFgjQ"  
}
```

2. After authorization by the *User*, the **Wallet** responds with the authorization data.
3. The Payment process. *Details are outside of this specification.*
4. If step #3 is successful, the *Merchant* provides a **Receipt** at the *receiptUrl*. Note that a **Receipt** may have states like **ready** and **inProgress** since gas station payments are not finalized until the pump operation stops.
5. If step #3 is successful, the *Merchant* sends a confirmation message to the **Wallet**.
6. When the confirmation has been received, the **Wallet** *polls* the *receiptUrl* for the **Receipt** which is subsequently stored in the **Wallet** for easy retrieval by the *User*.



# Summary of the Invention

## Information Flow

- The proposed information flow is supposed to be compatible with direct payments as well as two-phase payments.
- The use of a randomized receiptUrl makes the proposed system aligned with privacy requirements with respect to the payer. No user registration is required either.
- By supplying the receiptUrl together with the payment request, the proposed system becomes resilient to possible network errors, including a not received confirmation message. That is, the Wallet may start polling immediately after step #2.

## Receipt Characteristics

- The proposed system is supposed to be compatible with any technology for expressing a receipt, including XML, JSON, and CBOR.
- Receipts may be digitally signed.
- Receipts may contain any applicable information, all viewed through a specific rendering facility in the Wallet.
- Receipts may be “synched” to a cloud service making them available on multiple devices.