

mojaloop

# LPS Adapter

Update on adapter used to link Mojaloop to Legacy  
Payment Systems

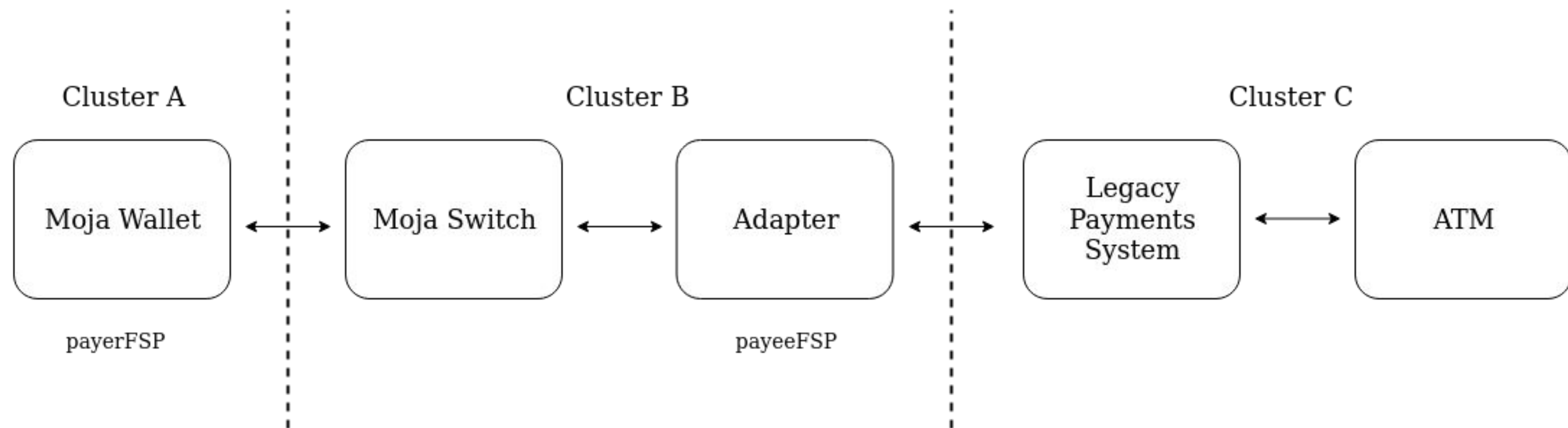
mojaloop

# Agenda

- Ecosystem
- Changes to Flow
- Use-cases
- Current Design
- Proposed changes
- Goals for March 2020
- Community contributions



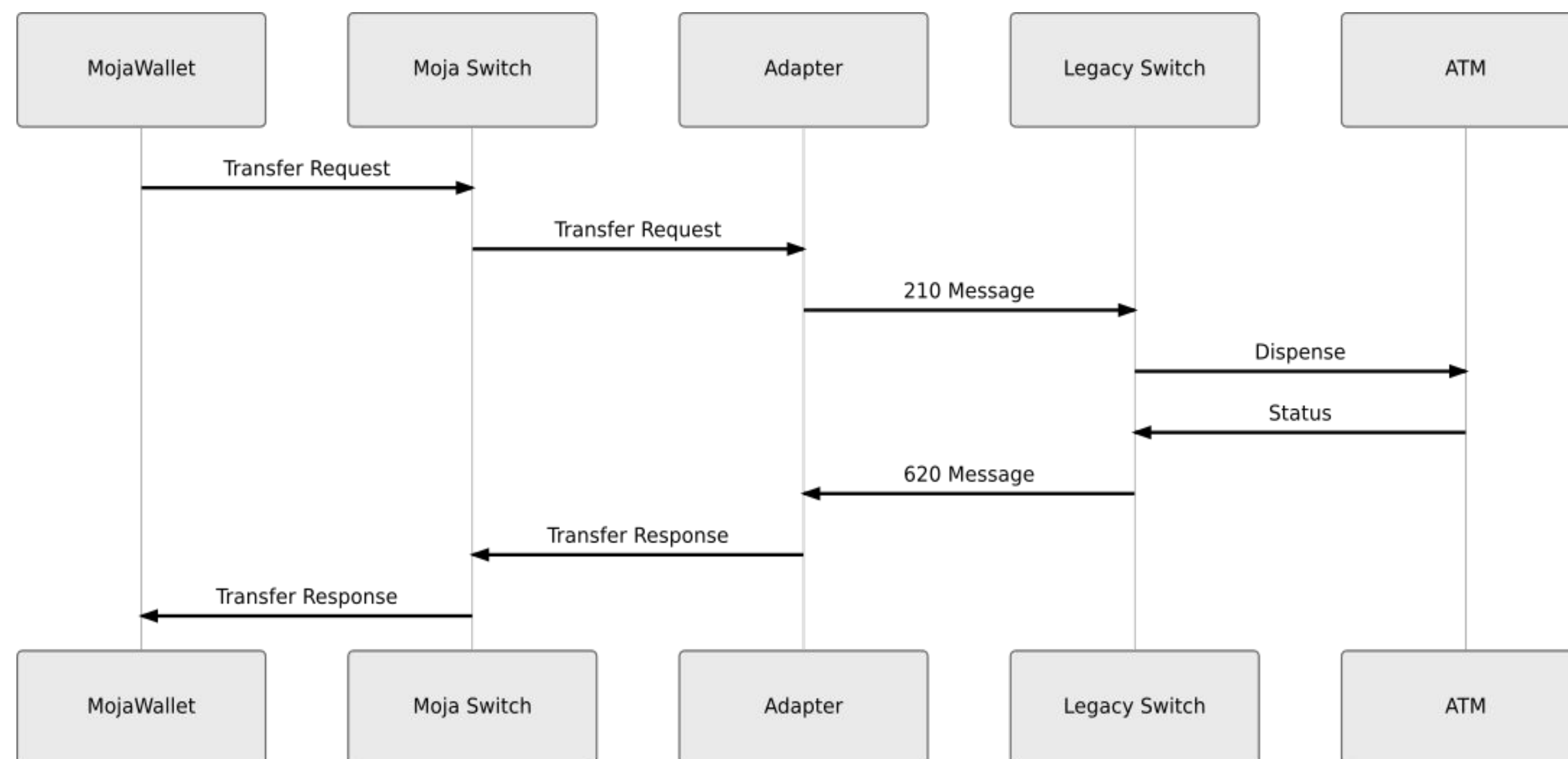
# Ecosystem





# Changes to Flow

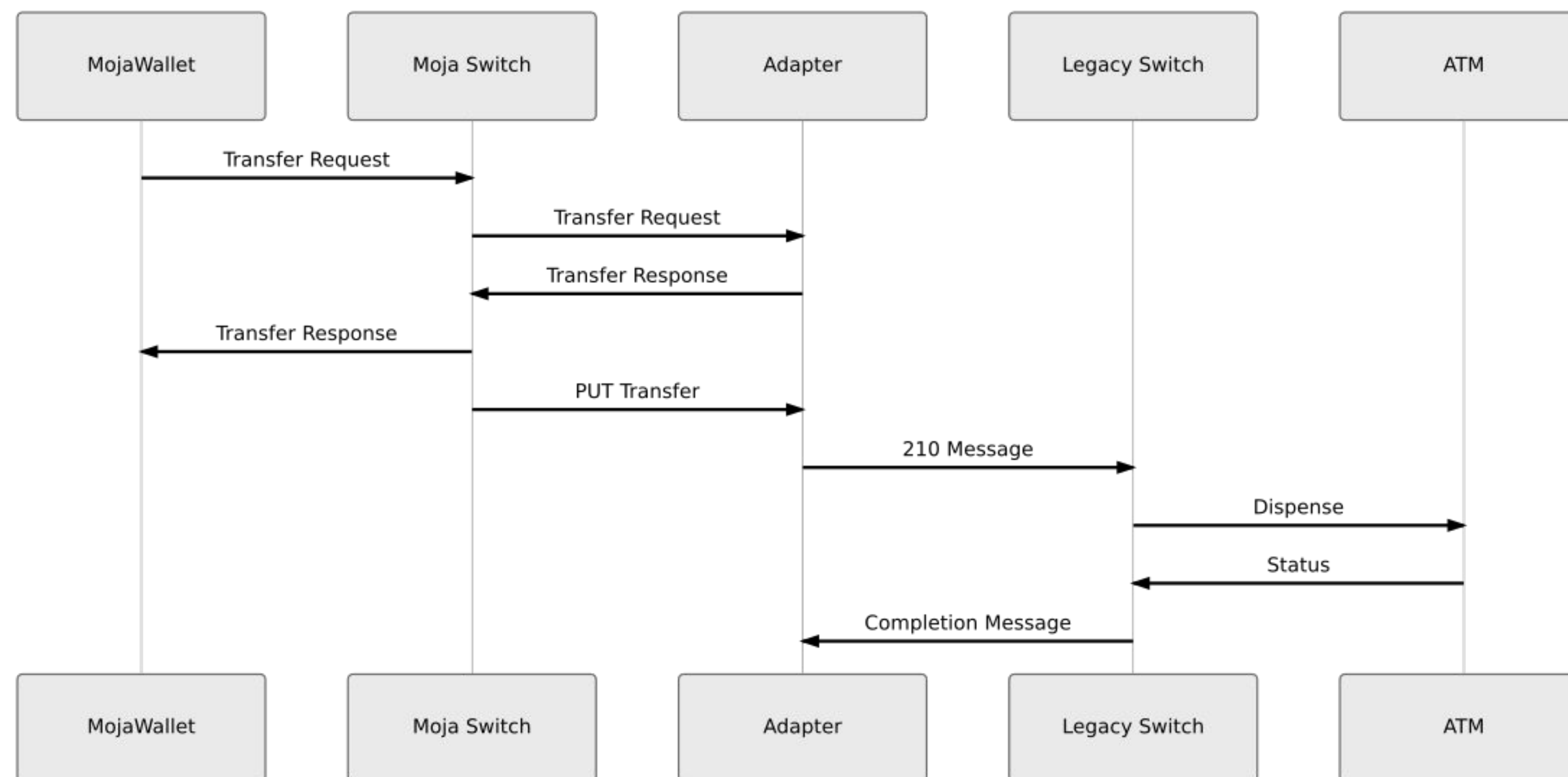
**Before:** Tell ATM to dispense before the transfer is committed





# Changes to Flow

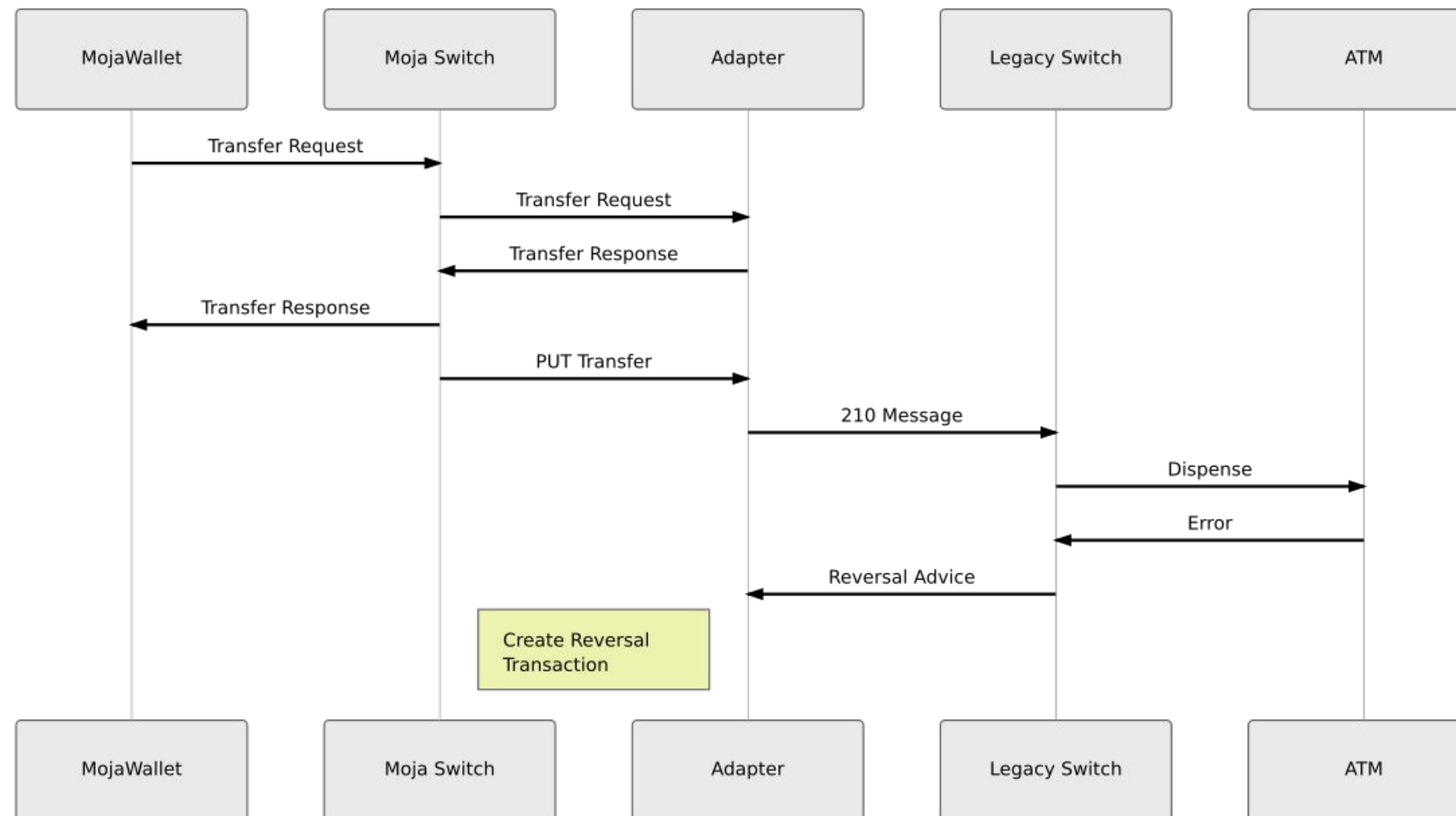
**After:** Commit transfer in the Moja Switch and then tell ATM to dispense.





# Changes to Flow

## Error during ATM dispensing





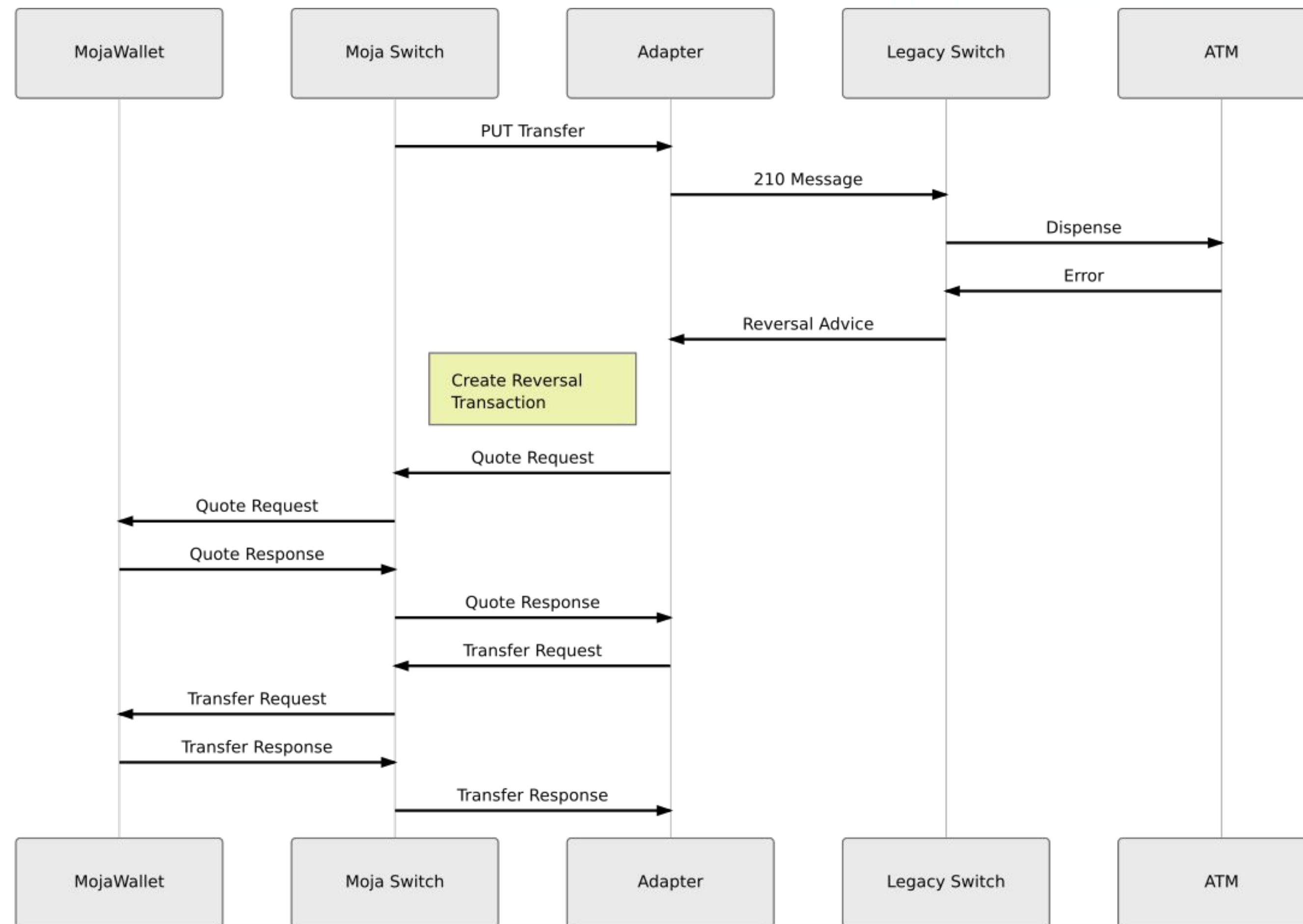
# Changes to Flow

## Error during ATM dispensing

```
Transaction = {  
  ...,  
  transactionType: {  
    scenario: 'REFUND',  
    initiator: 'PAYER',  
    initiatorType: 'DEVICE',  
    refundInfo: {  
      originalTransactionId: 'c3d82101-16b6-4391-bef6-2fc1234356d6'  
    }  
  }  
}
```



# Changes to Flow





# Use-Cases

- Golden path (completed)
- Refunds
- Incorrect otp / insufficient balance
- Incomplete transactions



# Current Design

## Assumption

- 1 in-flight transaction for a device

User configured value

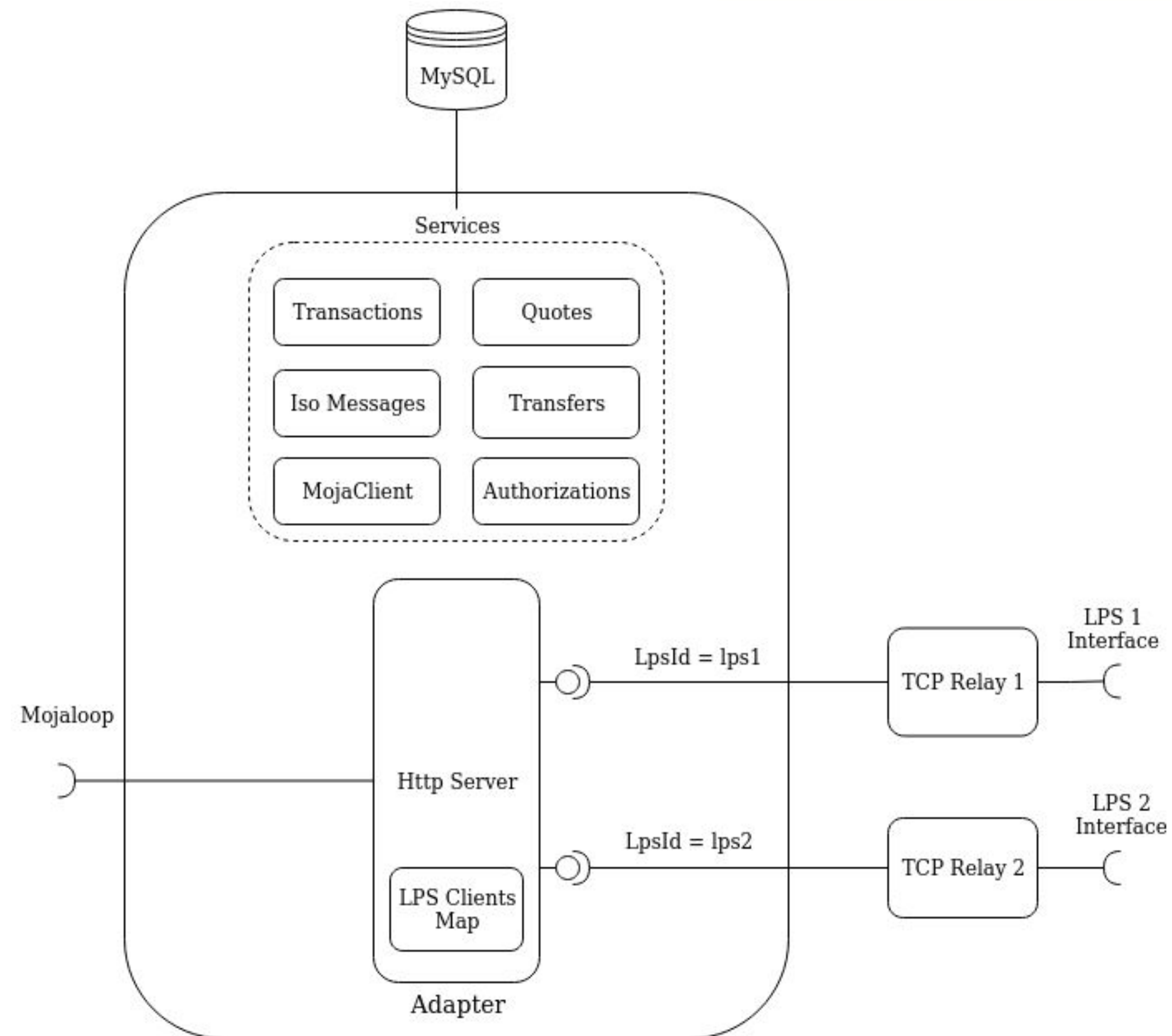
**LPS-KEY = <LPS-ID> - <FIELD 41> - <FIELD 42>**

Card acceptor terminal ID

Card acceptor code ID



# Current Design





# Proposed Changes

- Refactor Adaptor-TCP-Relay interface
- TCP-Relay to be responsible for field mapping and encoding/decoding
- Use BullMQ to add queue system (in-progress)



# Goals for March 2020

- 1st beta: Functionally complete - handle all use cases
- Complete proposed changes
- Hardening
- Documentation



# Community Contributions

- Mojaloop SDK: transaction requests and authorizations
- Transaction request service: Forward authorizations





# Thank You

QnA



# Appendices

0100 -> Account lookup

GET /parties/MSISDN/<**ID = ISO0100[102]**>



# Appendices

## 0100 -> Transaction Request

POST /transactionRequests

```
payee: {  
  partyIdInfo: {  
    partyIdType: 'DEVICE',  
    partyIdentifier: ISO0100[41],  
    partySubIdOrType: ISO0100[42],  
    fspId: <ADAPTOR_FSP_ID>  
  }  
},  
payer: {  
  partyIdType: 'MSISDN',  
  partyIdentifier: isoMessage[102]  
}
```

```
amount:{  
  amount: ISO0100[4],  
  currency: ISO0100[49]  
},  
transactionType: {  
  initiator: 'PAYEE',  
  initiatorType: 'AGENT' or 'DEVICE',  
  scenario: 'WITHDRAWAL'  
}
```



# Appendices

## Mojaloop Authorization Request -> 0110

Copy of 0100 except for the following fields

```
{  
  0: '0110',  
  30: format( quote.fees.amount ),  
  39: '00'  
}
```



# Appendices

## 0200 -> Mojaloop Authorization Response

```
{  
  authenticationInfo: {  
    authentication: 'OTP',  
    authenticationValue: ISO0200[103]  
  },  
  responseType: 'ENTERED'  
}
```



# Appendices

## Mojaloop Transfer Response -> 0210

Copy of 0200 except for the following fields

```
{  
  0: '0210',  
  39: '00'  
}
```