# WiFi Hotspot Payments using UPI

The Internet Service Providers (ISPs) are providing WiFi services at various places in cities, including at market places, railway and bus stations and airports. The service is generally free for the access for some-time (say 30 minutes) after which the user needs to pay for it. It has been observed that the usage after the free time allotted to the user drastically drops down. This could be due the partial reason of subscriber not being interested in paying for usage. But in our opinion, it is largely due to the hassles involved in buying the usage minutes. This situation strikes at the root of the ISPs WiFi business and he will not be able to provide the service itself. TRAI intends to involve the telecom industry and finance sector to evolve a system of easy payment to buy the WiFi services from ISPs. This will ensure rapid penetration of broadband services and lead to achieving Digital India goals.

So to summarize two services are required to use the service,

- Collect the payment from the user when he intends to use the service from any of provider

- If he underutilizes or want to stop the service before full period, he gets the refund immediately into his/her account
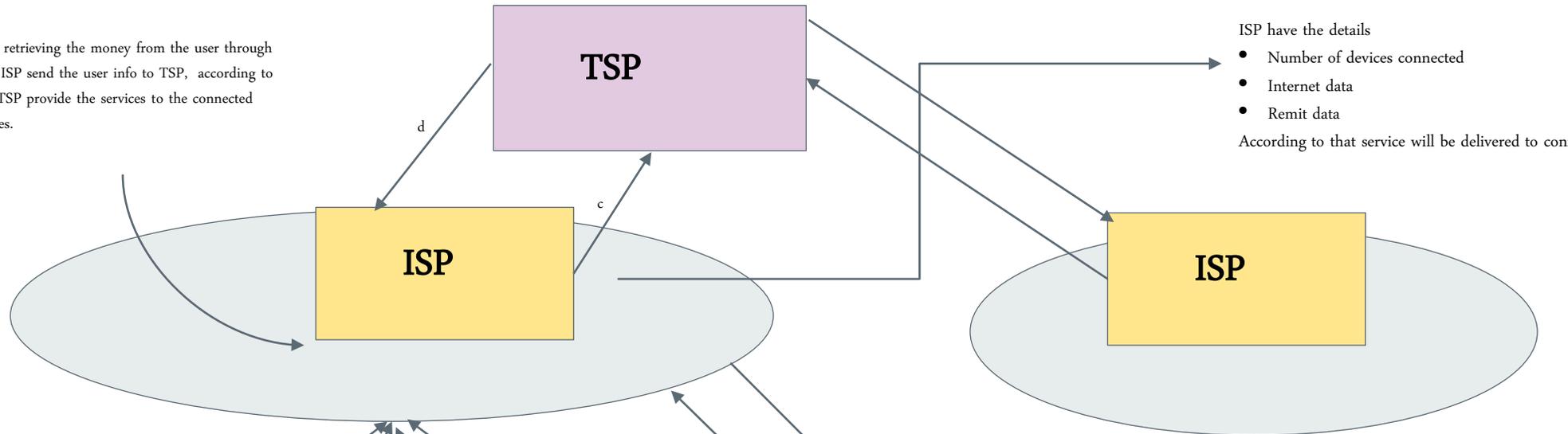
Payment via UPI

1

N

TSP

ISP

ISP
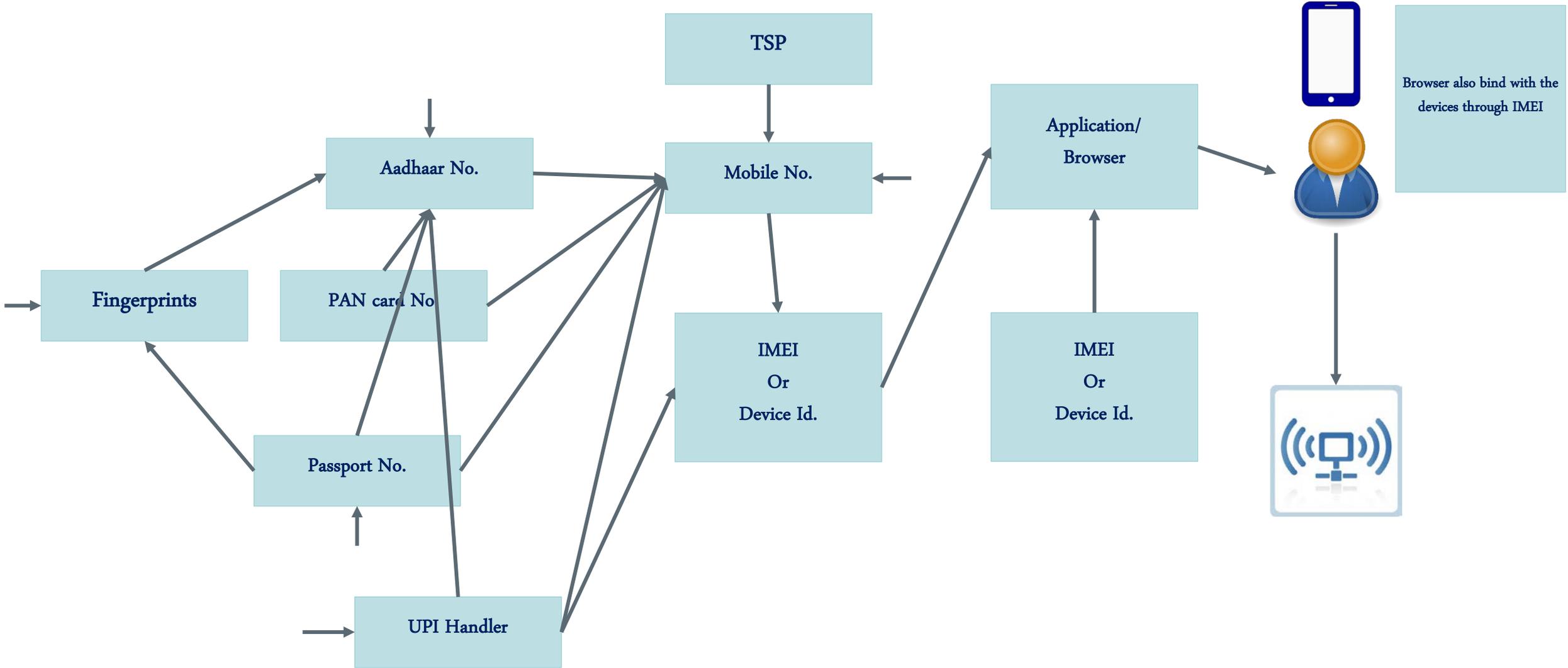
After retrieving the money from the user through UPI, ISP send the user info to TSP, according to that TSP provide the services to the connected devices.

ISP have the details
- Number of devices connected
- Internet data
- Remit data

According to that service will be delivered to connected devices.

d

c

b

a

1

If any devices data complete it will generate the independent popup message to the smart phone for continue or discontinue the service if YES then payment will be happen either through UPI App or through browser UPI gateway.

e1

e2

e3

e4

- Devices will be able to used their remit data in future.

N

| Device1 | Device2 | Device3 | Device4 |
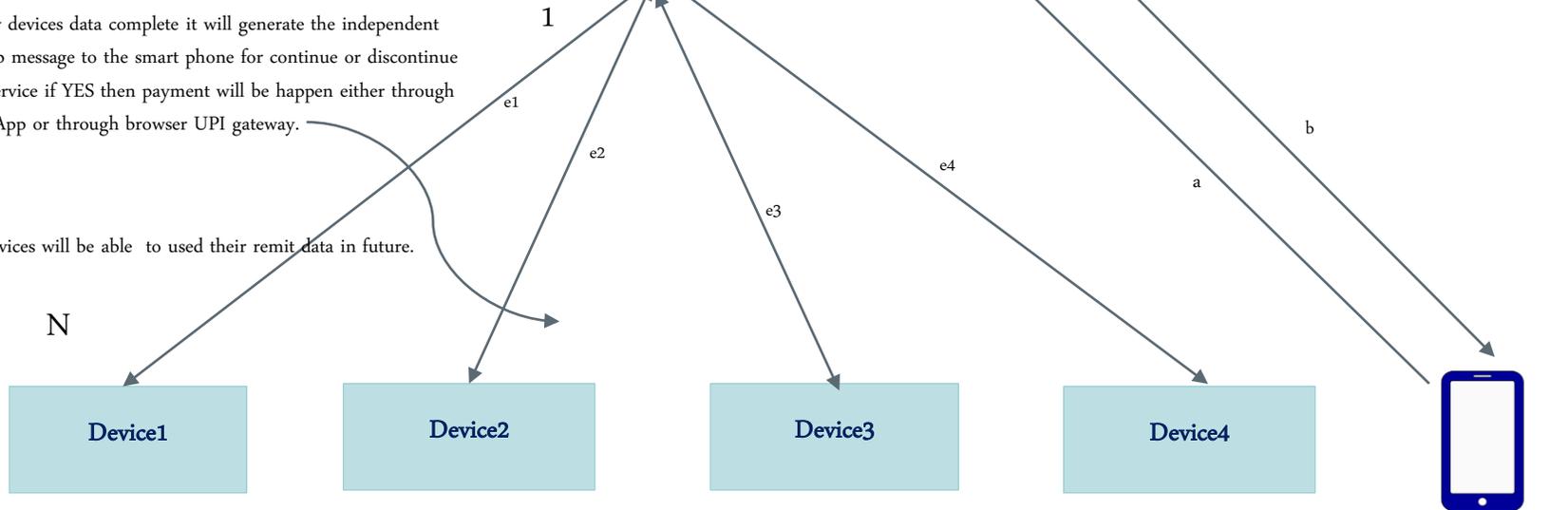
Smart Phone

Connected Devices info
Device1,2,3,4
1- Mac address / IMEI
2- Internet Data balance
3 -Remit Data balance

- **Since the WIFI will be accessed majority from smartphones and laptops, Unified Payments Interface (UPI) can be used for paying the charges for usages.**

- **UPI will provide the seamless payment experience to both i.e. Customers and ISPs through single identifier of ISPs and/or customers.**

- **UPI supports the instant credit and debit solution to the customer's account, best suitable for the requirement and small value payments.**

About UPI –

Unified Payments Interface (UPI) is a channel that powers multiple bank accounts into a single mobile application (of any bank) of a participating bank, merging several banking features, seamless fund routing & merchant payments into one hood. It also caters to the collect request which can be scheduled and paid as per requirement and convenience.

With UPI, one can perform merchant transactions with the help of single mobile App and use of a smartphone. Now, one can easily pay merchants (Pull and Push transactions) with this simple UPI enabled bank's App.
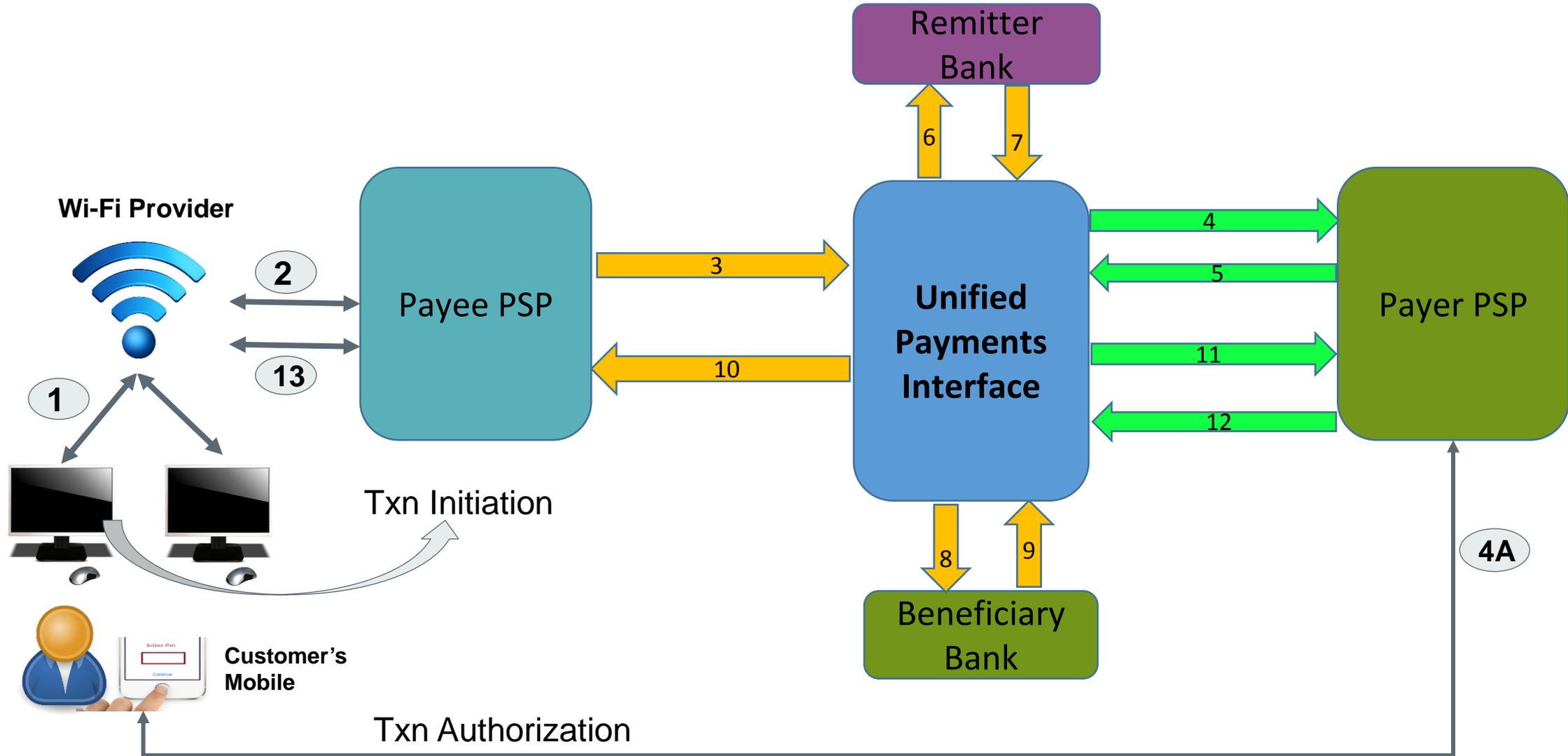
Pull/Collect:

a. Customer will go to WiFi hotspot Page, and select plan and go to payment option, select amount and select "Pay by UPI".

b. If customer will enter their Virtual address in the payment page.

c. Customer will receive notification on his Mobile on Bank's UPI App

d. Customer will click on notification and enter his UPIN on his Bank account

e. Customer will get notification of transaction successful/decline

f. The merchant (WiFi provider) shall get the payment fulfillment and provide the service to the user.

g. If the customer intend to move out of WiFi zone or want to end the services, the log out is sensed by the WiFi provider and remainder or the payment done based on time calculation or the bytes consumed is made to the customer's account. (using the same customers virtual payment handle)
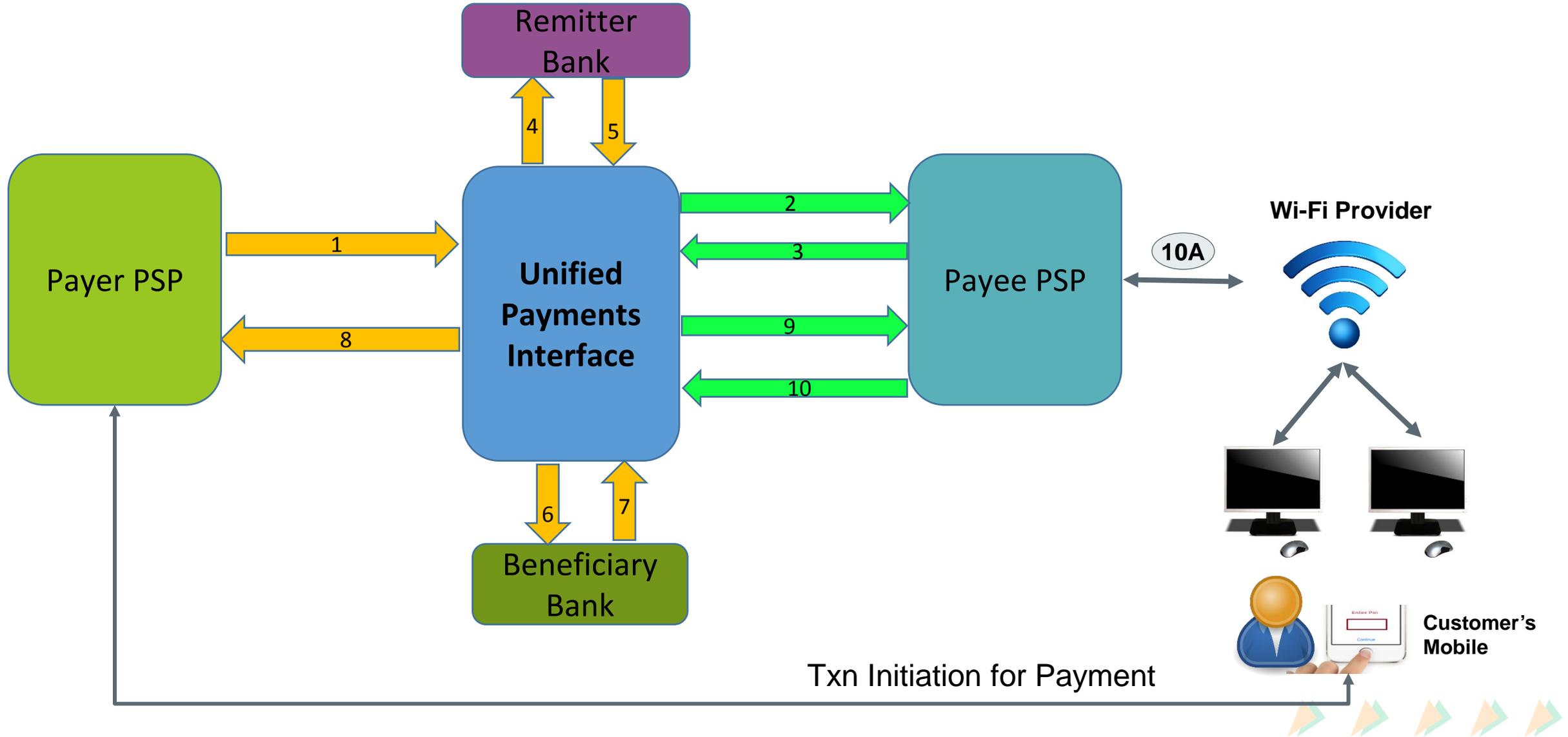
Push/Payment:

a. Customer will get account identifier/reference no and ISPs Virtual Address from ISP for his account. Account identifier/Reference No can be Mobile No or anything else required by ISP.

b. Customer will login to his UPI enabled APP and select "Payment".

c. Customer will enter Virtual address of ISP, Amount and in Remarks, he will enter the Account Identifier/Reference No as required by ISP and submit

d. Customer will enter his MPIN and initiate transaction.

e. On backend transaction will be routed to ISPs acquiring Bank, who will validate details with ISP and approve/decline transaction.

f. Upon getting transaction status, NPCI will send the same to Customer's app through their PSP Bank.

g. Upon getting successful response, customer can use WIFI hotspot.

h. Same refund process can be used if customer doesn't wish to utilize full service.

a) For Customers:

> *Bank account with any Bank offering UPI services to their customers*

> *Customer's bank account linked to his Mobile Number.*

> *Using same Mobile Number, customer should have UPI Mobile App of any bank offering UPI PSP services.*

> *Customer should have Virtual ID (say "username@bankname" e.g. ramesh@sbi.com) created for that Account No.*

> *Customer should have valid debit card number to onboard PSP application.*

b) For ISPs:

> ISP should be integrated as Merchant of UPI with any Bank live on UPI

> ISP should get virtual address from Bank.

a) Benefits for end Customers:

➢ **Mobile App based payments also support desktop for initiating the transaction**

➢ **Round the clock availability**

➢ **Single APP for accessing different bank accounts**

➢ **Use of Virtual ID is more secure, no credential sharing**

➢ **Single click authentication (great user experience)**

b) Benefits for ISPs:

➢ **Seamless fund collection from customers - single identifiers**

➢ **No risk of storing customer's virtual address like in Cards**

➢ **Single click 2FA facility to the customer - seamless Pull**

➢ **In-App Payments (IAP) i.e. Customer can make payment using same App**

Thank You