mowali
Project Update and Highlights

The Mowali Journey Thus Far...

Company incorporated

Brand developed and registered

Partner bank selected

User testing

Technology build and integration

Scheme rules definition process

Settlement functionality developed and contributed to OSS
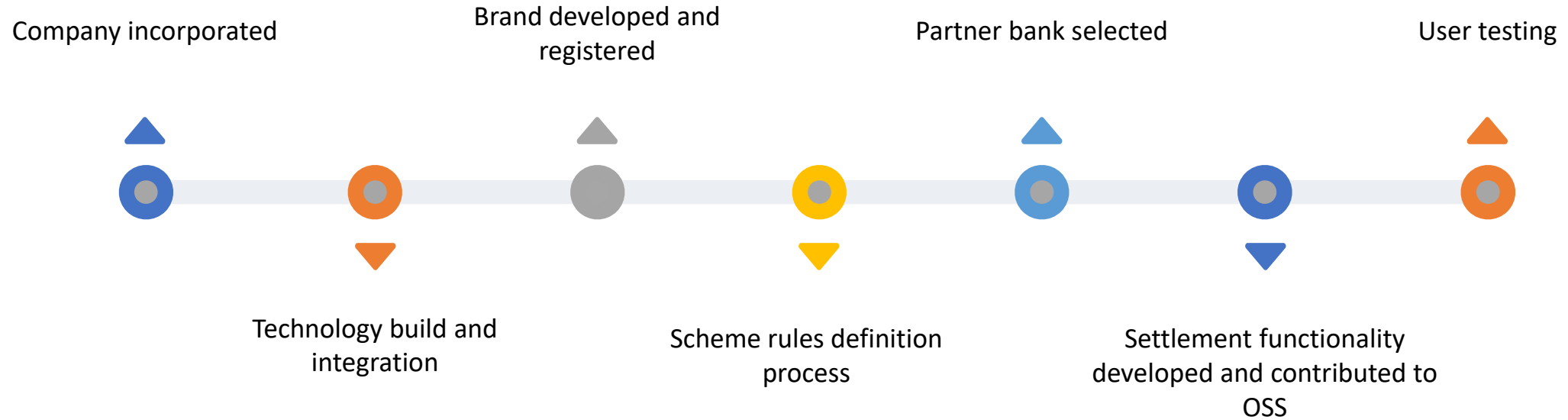
Mowali Update

Company Setup

- Company incorporated in Ivory Coast
- Hiring of staff has commenced with key roles being filled

Brand

- Brand registered
- Brand guidelines defined

Technology

- First use-case of P2P same country, local and cross border development completed on Mowali platform
- Technical integration finalized
- User testing scheduled for 30/01
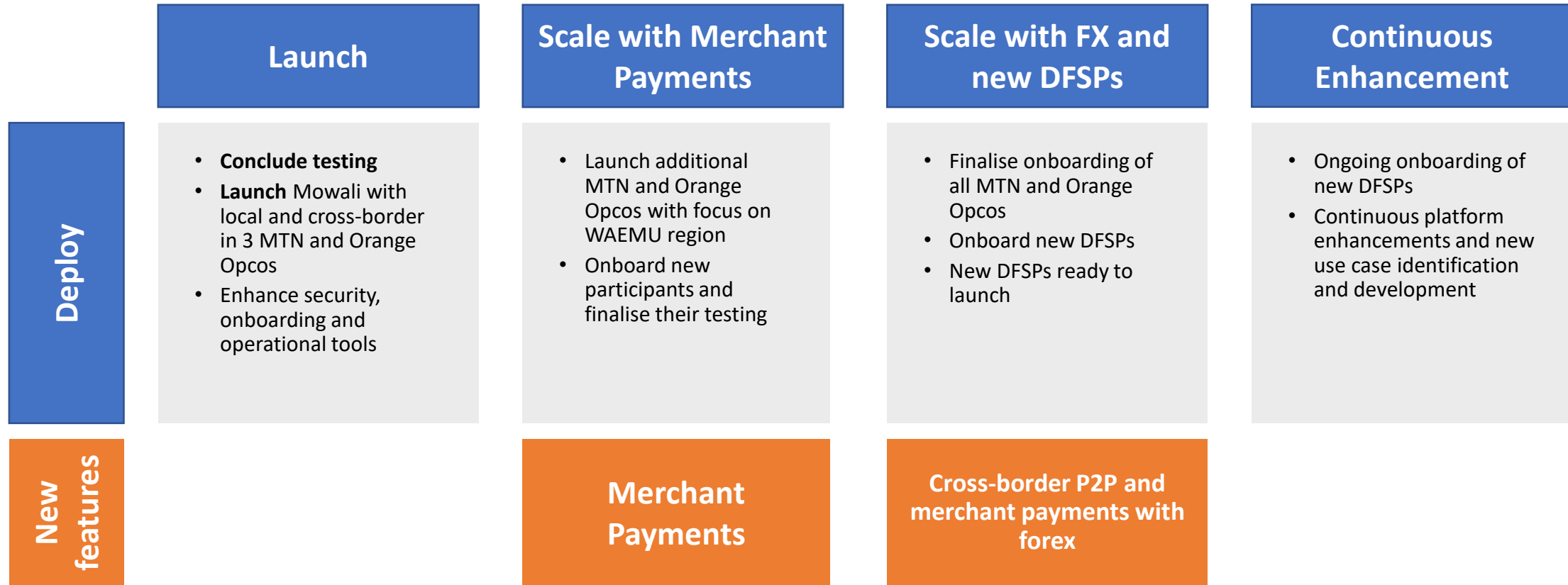- Initial user testing on simulator yielded good results

Advocacy

- Ongoing meetings with regulators (BCEAO, BEAC, DRC) to position Mowali
- Ongoing discussions with other mobile money operators within and outside WAEMU

Our learnings thus far…

- Common interpretation of API definitions resulted in some setbacks

- Connectivity needs careful specification

- Considerable time spent integrating OSS components, and allocation of resources to test OSS features

- Deployment architecture best practice recommendation for Mojaloop would be beneficial to reduce trial and error choices

Our roadmap for 2019

Launch	**Scale with Merchant Payments**	**Scale with FX and new DFSPs**	**Continuous Enhancement**

Deploy

- **Conclude testing**
- **Launch** Mowali with local and cross-border in 3 MTN and Orange Opcos
- Enhance security, onboarding and operational tools

- Launch additional MTN and Orange Opcos with focus on WAEMU region
- Onboard new participants and finalise their testing

- Finalise onboarding of all MTN and Orange Opcos
- Onboard new DFSPs
- New DFSPs ready to launch

- Ongoing onboarding of new DFSPs
- Continuous platform enhancements and new use case identification and development

New features

	Merchant Payments	**Cross-border P2P and merchant payments with forex**	

Our strategy is to grow scale and usage of the Mowali platform, and enable it to onboard new DFSPs at the soonest

Mowali is now an active contributor to the OSS...

- Mowali and Modusbox team have dedicated significant resources to testing, utilising, and providing feedback on OSS code

- QA coverage through resource assignment to testing of new functionality

- Mowali has also contributed directly by funding some of the feature development, and in particular:
  - Settlement functionalities
  - Alerting

We are committed to giving back to the community, and overall enhancement of the Mojaloop platform

Mowali deliveries to OSS in last PI

- Settlements

  - Real Time Financial Settlement as well as Deferred Financial Settlement

  - Automatic checking of NDC to avoid risks

  - Redesign to support both flows

  - New Accounts to support Bank integrations

  - Changes to the Settlements API

- NDC Alerting

  - Notification to Hub Operator and DFSP when approaching a configurable limit

  - Email Notifications

  - New Central Event Processor - integrated with email notification

- QA Coverage

  - Assigned resource to accelerate testing of new functionality

  - Automated core product feature testing

- Improvements in Processes

  - Alignment in periodic releases of Central services

  - Enhanced triaging and bug fixing

  - Enhanced DevOps code release methods and deployment quality

  - Contributing to the analysis of Mojaloop performance issues and solutioning.

**5 FTEs dedicated to OSS in the last PI,
including development, devops, QA and product support**

Our strategy for 2019

- Focus Mowali team efforts on developing and enhancing operational and onboarding tools

- We believe that Mowali can add significant value and can assist in developing the merchant payments use-case with community input

- FX is currently being investigated and developed by the OSS
  - Potentially use Mowali as pilot partner to launch;
    - Mowali partner bank has already been identified and could consider using them as part of the pilot (To be discussed with partner bank)
  - Mowali would like to utilise this work to launch cross-border different-currency P2P payments for all participating DFSPs

Mowali's vision for cross-currency

- FX is controlled by the hub and provided as a service to DFSPs, adding value to the overall hub offer

- Mowali partners with a bank to handle FX risk and liquidity management

- To facilitate settlement, a fixed FX rate is guaranteed by the bank over a given time window – ideally 24h to match current settlement frequency

- The hub must support two modes :
  A. Sender choses initial amount in his own currency
  B. Sender choses amount in target currency

- The hub does not take any markup and leaves it up to DFSP to manage

Current State – and requirement

Bank A1

Mobile Money System A1

Switch A

FSP A1

Mobile Money System A2
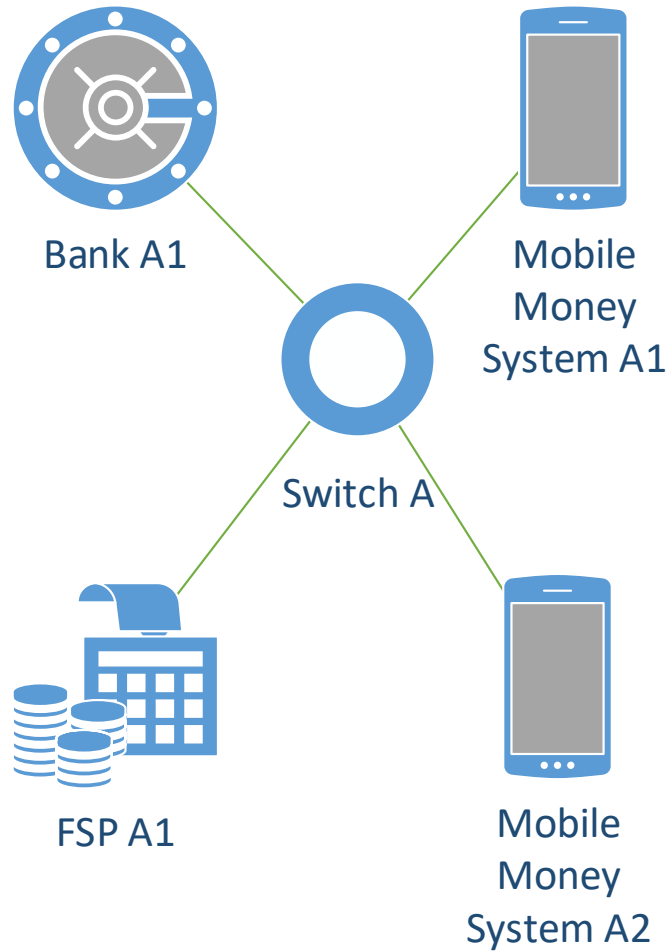
- ✓ DFSPs attached to the same switch can transfer funds between each other
- ✓ Funds transferred are immediately available to their recipients
- ✓ The switch manages deferred settlement between DFSPs
- ✓ The system can support multiple currencies and (in principle) jurisdictions

- ✓ The system cannot support currency conversion as part of a funds transfer in the same switch

Account Lookup
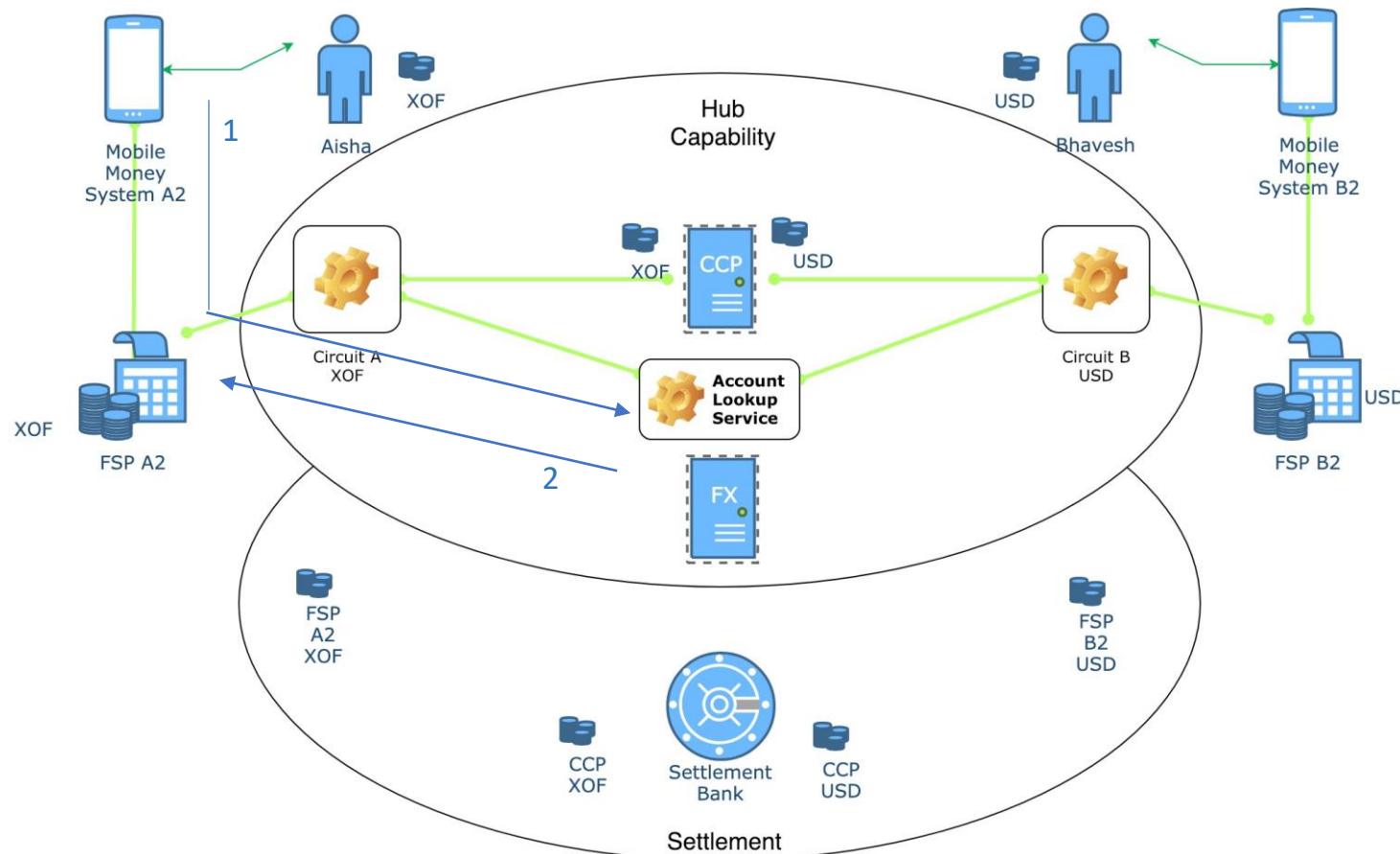
1. Aisha wants to send 1000 XOF to Bhavesh's MSISDN

2. Switch confirms the MSISDN is in the Switch and Held by FSP B2 – But a different Currency

Quotation - mode A, amount in initial currency
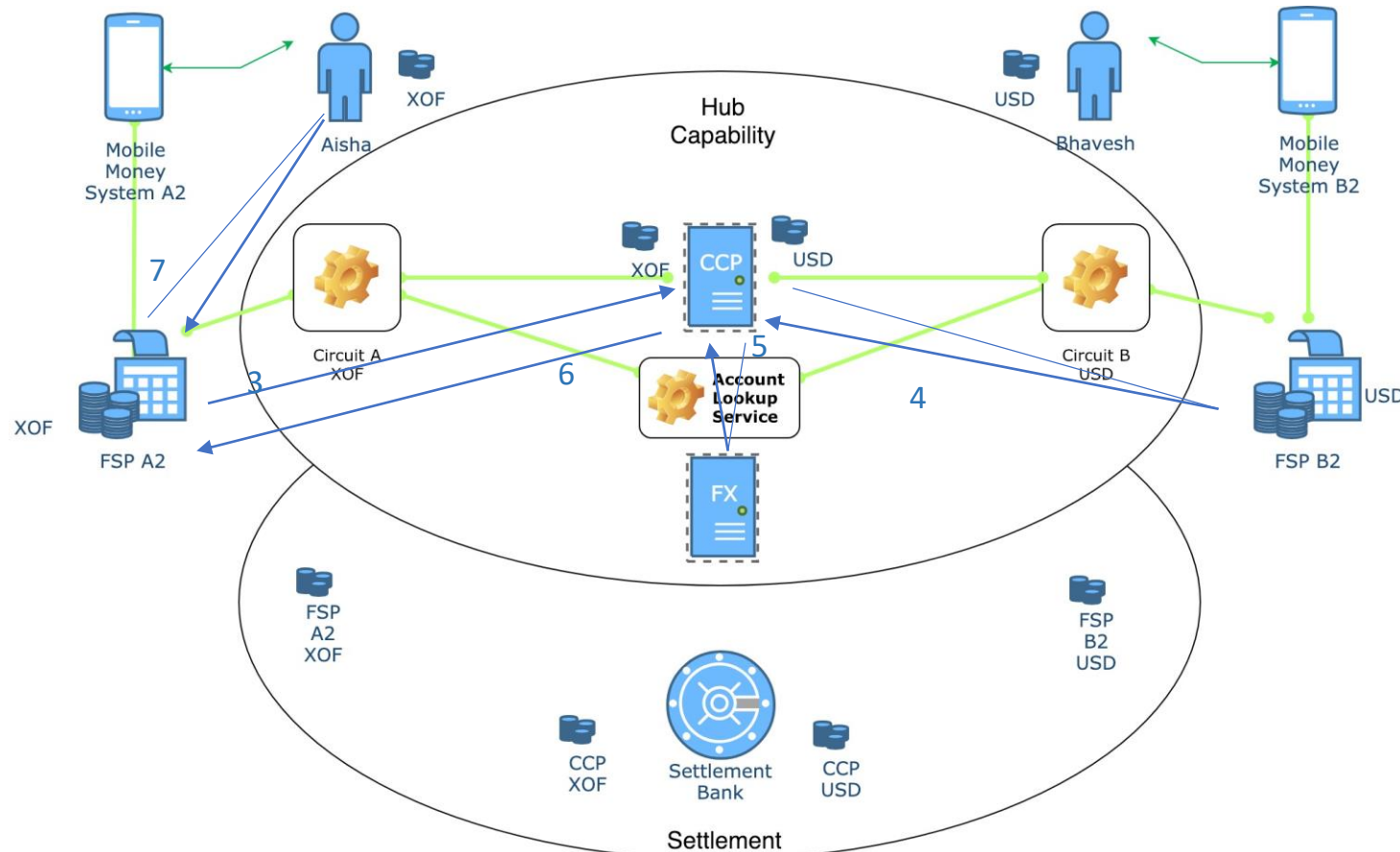
1. FSP A2 gets a quote from Cross Currency Provider (CCP) for Transfer of 10000 XOF to USD

2. CCP gets fees and condition from FSP B2

3. CCP gets quote for Transfer (Exchange Rate, Total Fees, Expiry time of quote, amount that will be given to Bhavesh)

4. Quote sent back to FSP A2

5. FSP calculates final costs and confirms acceptance with Aisha

Pre-determined exchange rate provided by the bank that is valid for an extended period of time

Transfer - mode A, amount in initial currency
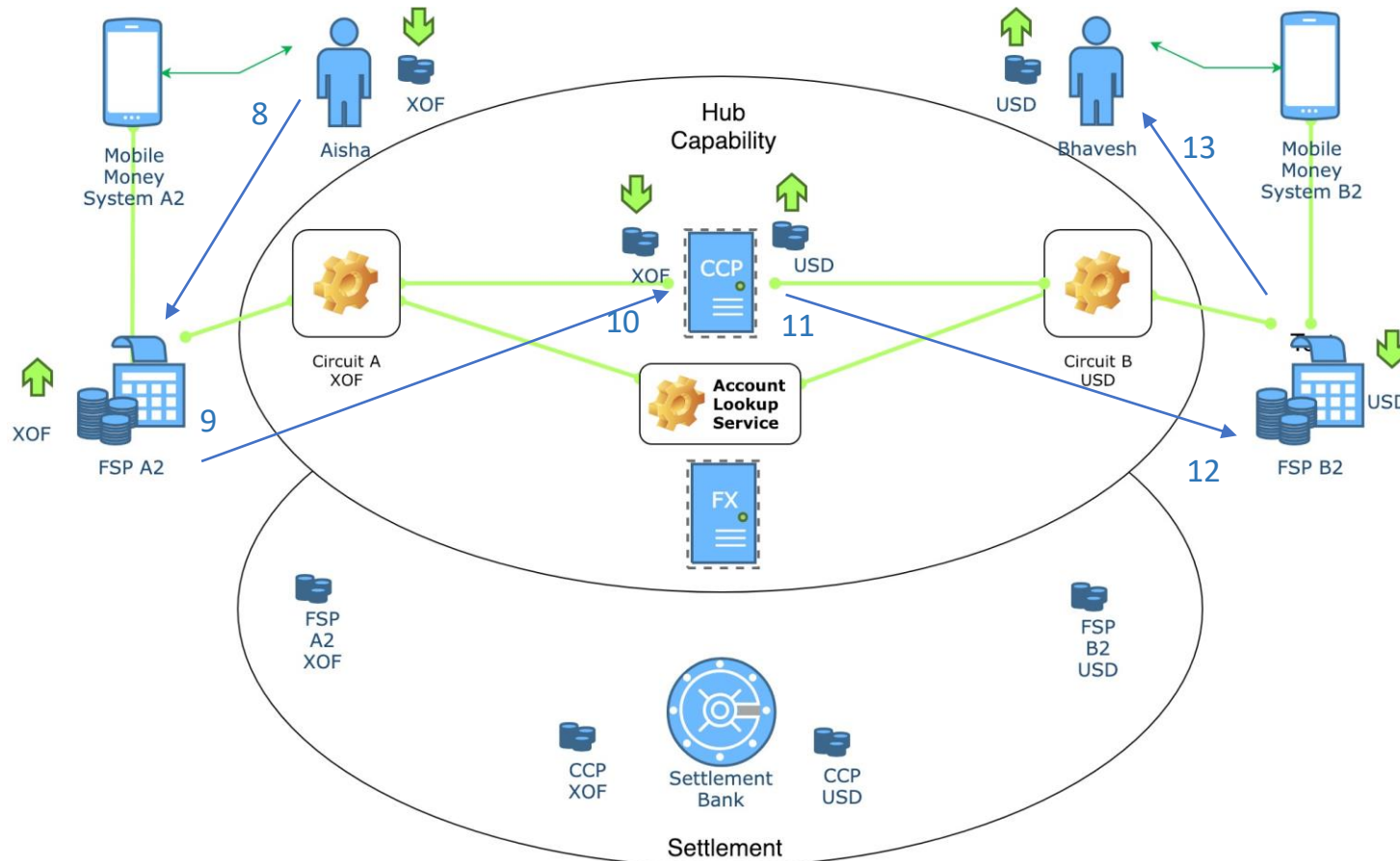
8. Aisha's account is reduced by 10000 XOF

9. FSPA 2's Net Debit Position is increased by 10000 XOF

10. CCP's XOF Net Debit Position is decreased by 10000 XOF

11. CCP's USD Net Debit Position is increased by 17.30 USD

12. FSP B2's Net Debit Position is decreased by 17.30 USD

13. Bhavesh's Account is increased by 17.30 USD

Settlement
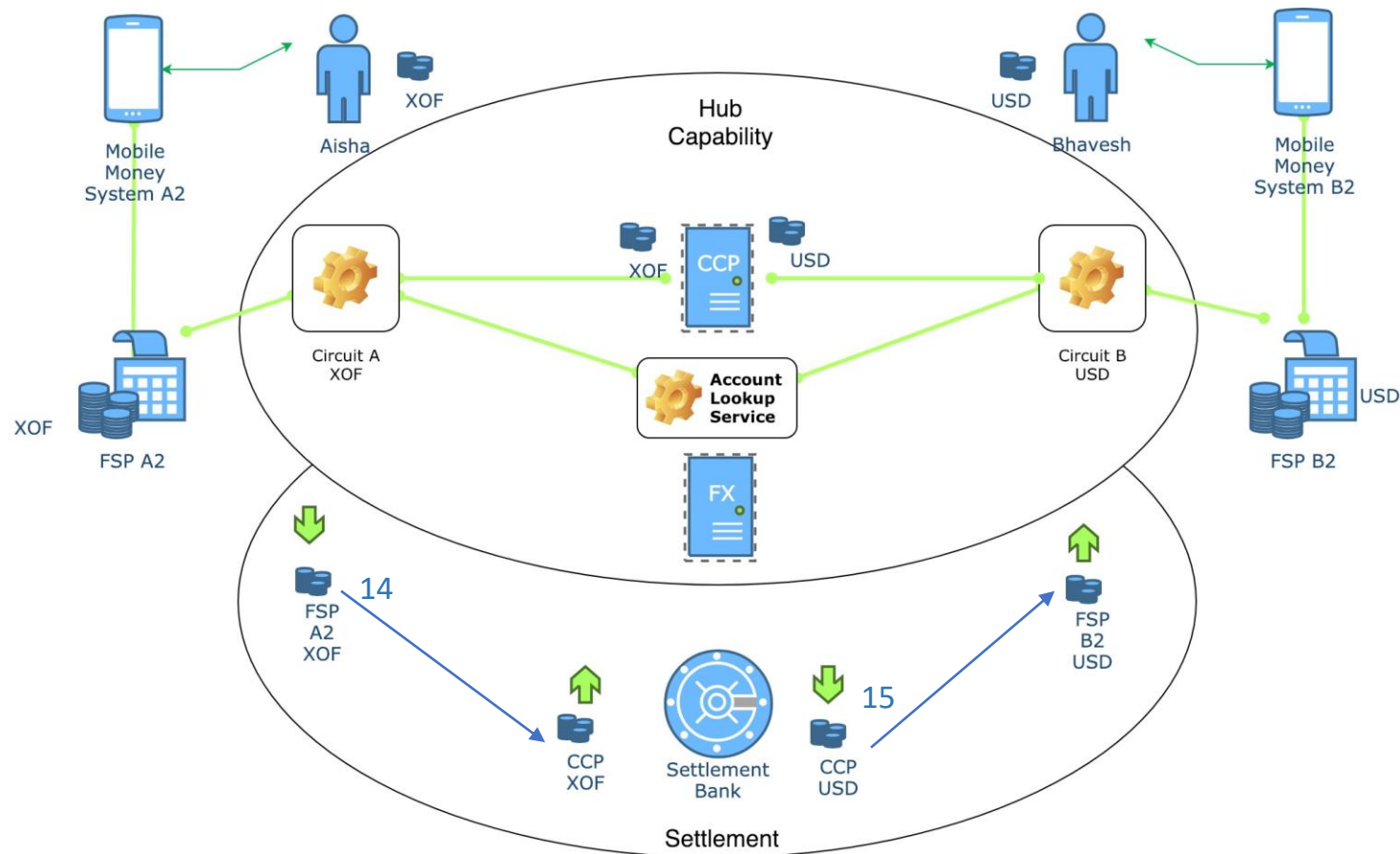
14. Net Settlement of the XOF Transfer flows from FSP A2 to CCP bank account

15. Net Settlement of the XOF Transfer flows from CCP to FSP B2 bank account

Mowali as a pilot for Mojaloop

- Use cross network PoC, but with a pragmatic short term approach
  - Test with 2-hop transactions (no need for multi hop transactions)
  - Single Cross network/currency module managed by the hub
  - Single FX provider controlled by the hub (partner bank)
- Emphasis on enriching the customer journey with 2 modes and operationalization (relationship with bank, reporting, …)
- Timeline - live in Q2/3 2018