

Terms of Reference
for
Standardize governance and compliance documents of online payment service
ICTA/GOSL/CON/CQS/2016/175

1. Introduction;

In present globalized world, many economies have brought up digital commerce to facilitate governments, businesses and citizens to be able to perform digital commerce and financial transactions with efficiency, ease and low cost.

ICTA as the apex government organization of ICT development across all sectors of the country is responsible of aligning entire country with the national policy of 'Digitization of Economy. Therefore, ICTA implements several initiatives to provide efficient and effective services to the citizens and businesses. Improvements and developments of digital infrastructure is one of the key initiative implemented towards achieving the above objective.

ICTA will be driving revolutionary technologies such as High Speed Fiber Networks, Government Cloud, Data Centers, Common Payment Platforms, Education Portals and Social Media initiatives etc. across Sri Lanka which will transform the nation towards information Society. Infrastructure facilities are required to facilitate the on-gong initiatives until the common infrastructure facilities are implemented.

2. Background;

In the rapidly evolving technological society to remain competitive, an organization must have to have comprehensive methods to reach individual target segments and provide its services to citizens in a more convenient and reliable manner. With the increasing use of internet and mobile devices, common online service and payment platform has been recognized as a key service baseline.

ICTA in collaboration with the ministry of finance, has taken the initiative of bringing up digital commerce with ease in Sri Lanka by introducing “The Online Payment Service”. Currently governance documents of online payment service are not standardized as per the industry standards therefore to standardize the governance and compliance documents it intends to engage a consultant firm with relevant industry experience.

3. Objective

ICTA intends to engage a consultancy firm to standardize the governance and compliance documents of online payment service within three month's period.

4. Scope of Work:

- 4.1 Consultant should review and understand the overall architecture and design of the online payment service initiative.
- 4.2 Consultant should review and understand functional aspects identified in this assignment to determine the overall functional scope and Non- Functional requirements of the proposed solution. (Refer: Annex 1- Business process flow).
- 4.3 Consultant should study and identify the current and future requirement of the online payment service with relate to governance, policies, and management documents. On completion need to standardize and formulate relevant documents as per industry standards.
- 4.4 Work collaboratively with ICTA throughout the tenure of the project duration.
- 4.5 All staff of the provider who are engaging with the assignment are required to sign a Non-Disclosure Agreement (NDA) where applicable.
- 4.6 Adhere to ICTA project management practices.
- 4.7 Refer following Annexes which form a part of the Terms of Reference.

Annex 1 - Business process flow of online payment service

5. Deliverables and Output;

The Consultancy firm will be engaged for a period of **3 months** for the requirement gathering, reviewing, standardizing and formulating governance and management documents with a maximum ceiling of 100 Person days.

Consultancy firm is required to submit the following list of deliverables for the assignment.

No	Deliverables	Payment
5.1	Successful acceptance of the following: 1. Time Sheet 2. Formulated Governance and Management Documents	As agreed person day rate in the contract x number of person day rate for each documentation.

6. Services and Facilities Provided by ICTA

6.1 High level requirement documentations (System Requirement Specification)

6.2 Draft Documentation:

6.2.1 Business continuity management and disaster recovery plan

6.2.2 Overall NPP process governance

6.2.3 VPN access policy

6.2.4 Password management policy

6.2.5 Access management policy

6.3 Access to ICTA Document repository

7. Review Committees and Review Procedures

All deliverables will be reviewed by the team appointed by ICTA.

- END -

[Annex 1] –Process workflow of proposed Online Payment Service

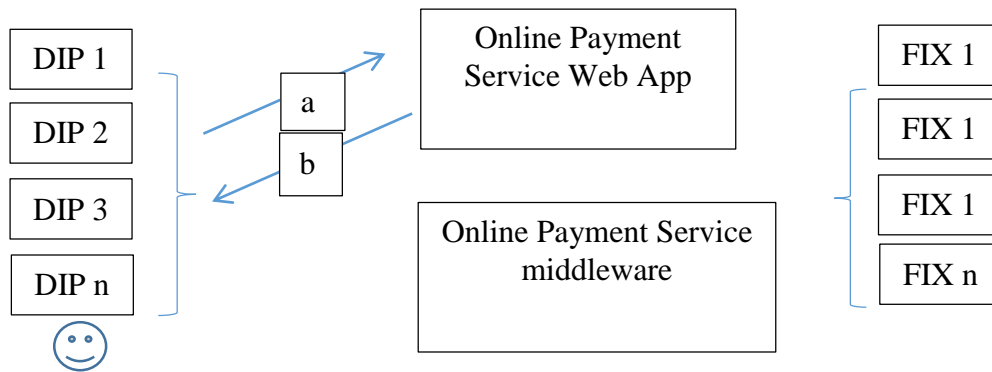
Following documentation provide high level understanding on how the process integration flow works and how the communication between each entity takes place.

In order to make a transaction, citizens should get registered in Online Payment Service first. To register there are couple of mechanisms available:

1. Register via portals – Off line (Portal oriented)
2. Register via portal – Online (Portal oriented)
3. Register via Fix – (FIX oriented)

1. Citizen registration to Online Payment Service.

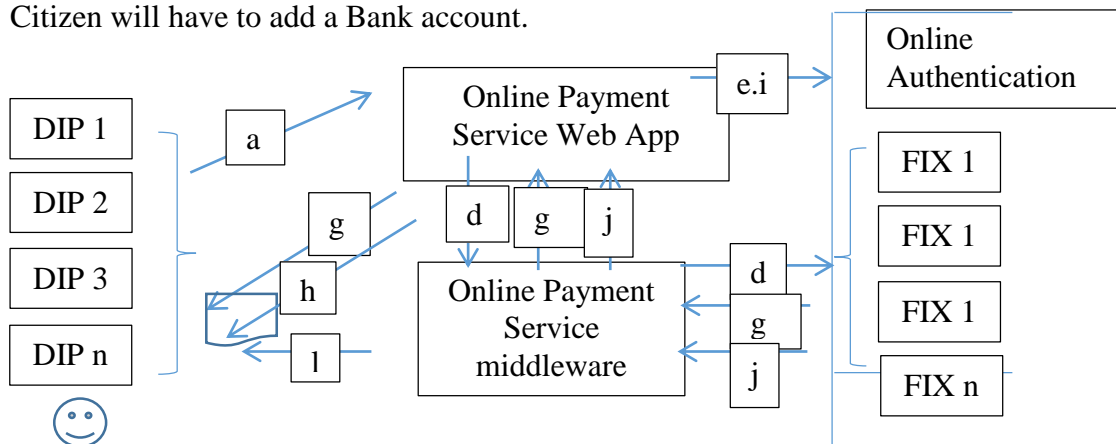
Citizen will have to login through any of the available portals.



- a. Citizens access the DIP portal and will get re-routed to Online Payment Service web app.
If the Citizen has not signed up with Online Payment Service, the Citizen’s Basic information will be entered and profile will be created in web app.
- b. An access token will be generated and passed back to portal.

2. Citizen Adding Accounts to Online Payment Service

Citizen will have to add a Bank account.

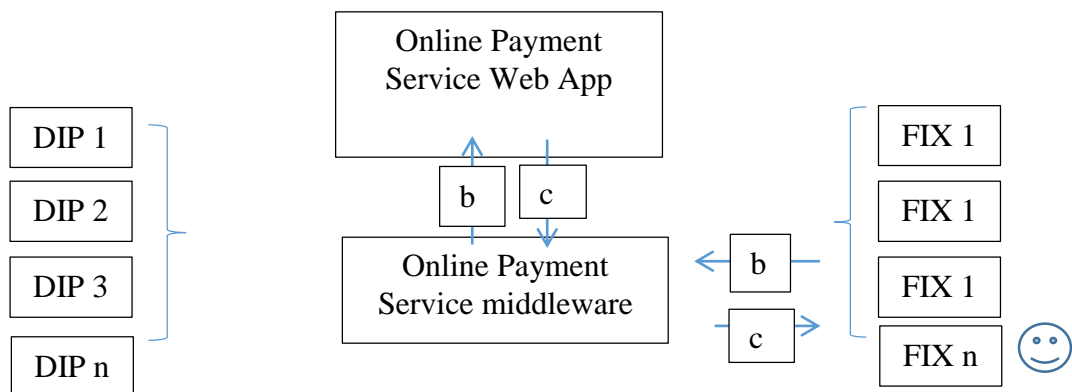


- a. Citizens access the DIP portal and will get re-routed to Online Payment Service web app.

Citizen will log into if he/she has not logged in

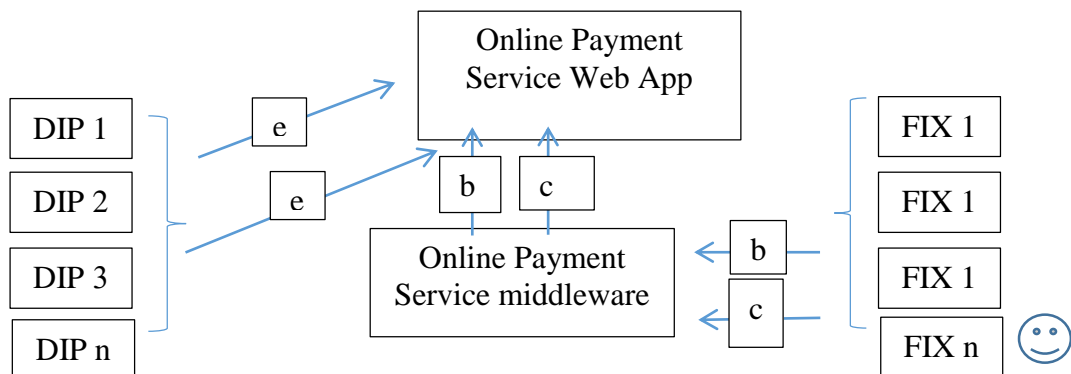
- b. Citizen will add basic information of bank account.
- c. The scope to include this account to share this account and its secret transaction key (Online Payment Service to Portal)
- d. Web App Initiates an API call via middleware to relevant bank, informing the citizen adding the Bank account for Online Payment Service transactions.
- e. A verification code will be generated at Online Payment Service Web App and sent to FIX which will be used for physical verification of the citizen.
- i. If the bank can perform online authentication and send a redirect link, then Online Payment Service Web App will redirect the User(Citizen) to the redirected site
 - Once the user authenticates himself on the bank web authentication the bank will immediately confirm the Verification code.
 - ii. If the User does not have an online authentication method, the User may print the manual authentication letter and send it to the bank.
 - Once the FIX receives the letter and verifies the User then they will send the security token confirming the verification code.

3. Profile Registration for Online Payment Service FIX (OTC)



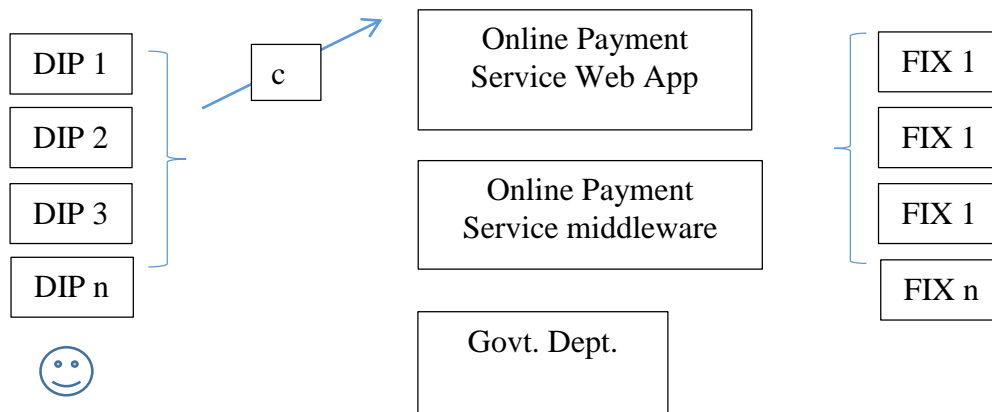
- a. Citizen will arrive at FIX to register their profile at Online Payment Service.
- b. API call to register the profile will be sent to Online Payment Service Web App.
 - I. Online Payment Service Web App will create the profile with the basic User information which will include email address and mobile number
 - II. Online Payment Service will then send the user login link to confirm if the information is correct.
 - III. Online Payment Service will also send an OTP code at the first login.
- c. Citizen profile is created and Citizens ID is provided to FIX.

4. Adding Bank Account to Profile for Online Payment Service at FIX (OTC)



- a. A Citizen visiting the FIX can request the FIX to add the bank account to Online Payment Service profile.
- b. API call will be made from FIX adding the Bank Account to specific profile ID.
- c. FIX Secret transaction key will be generated, activated and sent to Online Payment Service.
- d. A verification key will be generated for the Account being added to Online Payment Service.
- e. The User will then have to login and add the verification code under Function “ADD Account”

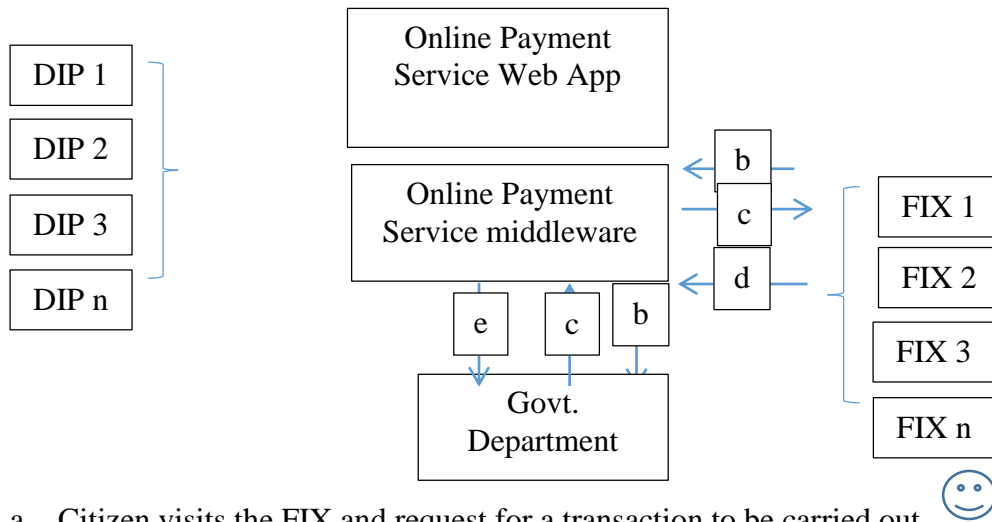
5. Portal oriented transaction



- a. Citizen logs in to his/her preferred portal
- b. Creates a transaction for fund transfer/payment
- c. Portal sends transaction to Online Payment Service.
 - i. If the user oAuth token is valid, then a transaction will proceed to Online Payment Service and then to FIX.

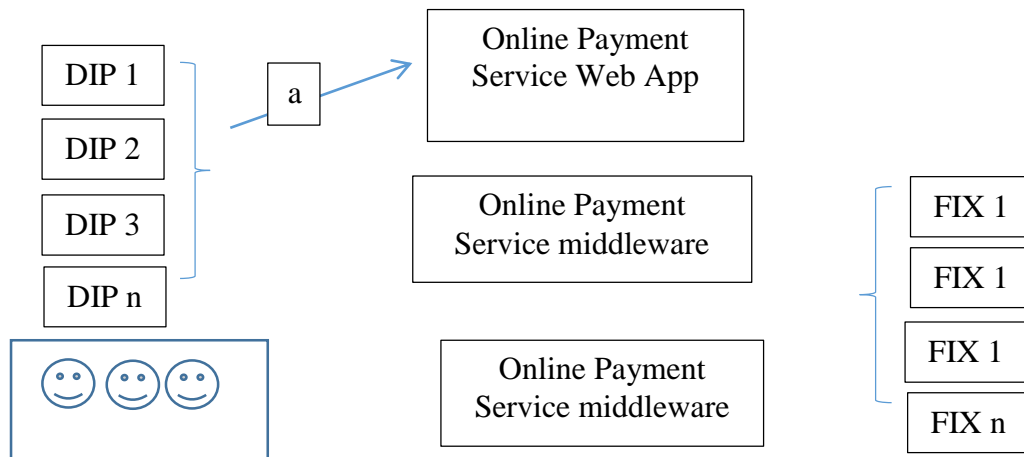
- ii. If oAuth token is expired, then a redirect link to login will be sent by Online Payment Service. The user will login and the oAuth token will be refreshed and the transaction will be sent.

6. FIX oriented transaction (OTC)



- a. Citizen visits the FIX and request for a transaction to be carried out.
- b. The FIX will send the transaction to the Online Payment Service with the Profile ID and other details.
- c. Online Payment Service will then send the received transaction back to the FIX like any other portal instruction.
- d. FIX will confirm the transaction and send the confirmation to Online Payment Service.
- e. On the receipt of the Transaction Online Payment Service will update the Merchant transaction log and in case of government transactions their necessary software API.
 - If government the receipt details and necessary information will be sent to the FIX.

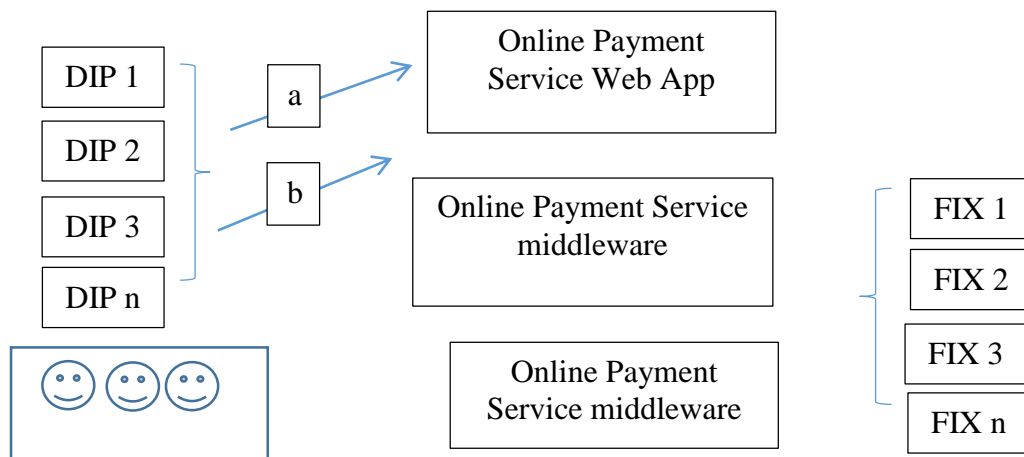
7. Registering a Business



Registration

- a. The User will log into account and register the business under the tab “Add a business”, with basic information.

8. Adding a bank account to a Business



- a. The User will log into Online Payment Service Web App and “Add bank account” the standard process like adding account to personal accounts will follow.
- b. Adding Admins, creators, transaction signers will be set through the bank account settings.

9. Transactions for Business Banks Accounts with multiple signatories.

- a. The transaction will be created at the Online Payment Service, when each person signs the transaction the ProfileID will be updated to the transaction and the default rules app (portal) will be notified.
- b. If the default rules App is not selected, the basic rule on Online Payment Service with multiple signature will run and as soon as the respective signatures are received it will be sent to the FIX from Online Payment Service.