



First Meeting of ITU-D Study Group 1

Geneva, 28 November – 2 December 2022

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Question 1/1: Strategies and policies for the deployment of broadband in developing countries

Source: ITU-APT Foundation of India.

Title: Accessing Broadband Services using Wi-Fi connectivity through Public Data Office.

Action Required: Participants are invited to consider this document.

Abstract:

This contribution has been prepared to familiarize the participants of this meeting with the practice used in India, for accessing Broadband Services using Wi-Fi connectivity through Public Data Office (PDO).

It is popularly known as Wi-Fi Access Network Interface (WANI) and any person like business person, resident, student, small grocery/tea shops owner or restaurants can function as PDO.

General Information regarding working of WANI:

For the vast majority of population, Broadband has become so essential for their professional, personal, and social lives that one cannot think to survive without broadband.

Majority of the common people access Broadband either through their personal mobiles or Wi-Fi while working in their house/office. Problems comes when someone is roaming in the area away from home/office, where mobile signal strength is poor or crossed daily usage data limit.

To proliferate Broadband through Public Wi-Fi networks, WANI framework has been envisaged for provisioning of Broadband through Public Wi-Fi Hotspot providers.

Public Data Office (PDO) now started functioning in India (like Public Call Office, PCOs working few years back) using Wi-Fi Access Network Interface (WANI) ecosystem.

WANI Ecosystems consists of:

1. Public Data Office (PDO) – providing services to the end user.
2. Public Data Office Aggregator (PDOA) - provides aggregation services to PDOs like authorization and accounting, thereby facilitating PDOs in providing services to the end consumer.

3. App Provider - develops an application (App) to register users and discover and display WANI compliant Wi-Fi Hotspots in the proximity for accessing the internet service and also authenticate the potential Broadband users.
4. Central Registry - maintain the details of App Providers, PDOAs, and PDOs.

To facilitate ease of doing business and encourage local shops and small establishments to become Wi-Fi providers (PDOs), Government of India approved that the last-mile Public Wi-Fi providers requires no license, no registration and no need to pay any fees to the Telecom Department.

Role of the PDO -

1. Contact a PDOA, to finalize business model.
2. Identifying and procuring appropriate type of Wi-Fi Access Point (AP).
3. Arranging fixed-line Broadband Internet connection from any Internet Service Provider (ISP), working in the area.
4. Install Wi-Fi Access Point and start providing service.
5. PDO is not liable to meet any security or compliance requirement.
6. No registration or no license is required to function as PDO and no license fee is to paid by any PDO.

Role of the PDOA –

1. It will help PDOs to finalize business model and to purchase Wi-Fi Access Point.
2. It provides user interface to the end user to buy a data plan as per the requirement.
3. To keep track of the data consumption of the user.
4. All backend operations including payment gateway will be performed by the PDOA including collecting money online from the end user and share the amount with PDO.
5. Number of PDOs can be connected with single PDOA through Internet.
6. PDOA has to only register with the Telecom Department/ Central Registry.
7. PDOA need not to pay any license fee to Telecom Department.
8. For security requirement, PDOA shall make necessary provisions by installing server for storage of user data for one year to ensure compliance with legal provisions, as required.
9. The user data privacy will be ensured by PDOAs.

PDOA role is similar to the way services are offered by Ola who aggregates multiple taxis or Oyo who aggregates multiple hotels.

Role of the App Provider –

1. App Provider, who will develop an application (App) to register users.
2. App will discover and display the WANI Access Points in the proximity of the user.
3. It will authenticate the potential Broadband users.
4. App provider has to register with the Telecom Department/ Central Registry.
5. App provider need not to pay any license fee to Telecom Department.

Role of the Central Registry -

1. Central Registry will maintain the details of App Providers, PDOAs, and PDOs. It is maintained by the Department.
2. It is responsible for the certification of PDOA's and App Provider's Software.

So, WANI scheme will not only increase the penetration of the internet including of rural area, but will also open additional source of income from selling internet connectivity. Similarly, availability of good quality internet connectivity facilitating online transactions for shop owners will also increase.
