



## **PM Wani: The PCO model of public wi-fi stands to fulfill long pipe dream**

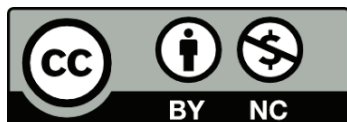
How DEF Work of Community Wireless Network and Advocacy Led to PM WANI

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## Introduction

Ericsson, in its [Mobility Report](#) for June 2020 states that in the year 2019, Indians have used about 12 GB data per month on an average which is the highest consumption globally with expectancy of doubling of this rate in the next five years. Whilst the above data highlights the internet consumption by the Indians, the Narendra Modi led government launched its Digital India mission in the year 2015 with an aim to improve the online infrastructure by increasing Internet penetration to help the country digitally empower in the field of technology.

In order to pave a way forward of the Digital India mission, on 09 December 2020 PM-WANI (Wi-Fi Access Network Interface) was passed in the cabinet. Prime Minister Narendra Modi hailed this scheme as “historic” that would “revolutionise the tech world”.

<https://twitter.com/narendramodi/status/1336705757169942528?s=20>

The scheme has been launched with an aim to increase the penetration of internet connectivity, thereby improving digital access. This would be rolled out through large scale deployment of public Wi-Fi hotspots and access points at the local stores and neighborhood shops as availed by the Public Data Offices (PDO). These will not involve any license, fee or registration. PDOs will be set up on the similar

lines as of the Public Call Offices (PCOs). WANI not only aims to be a low-cost internet option for the underserved populations of the country, it would also significantly have the potential to revolutionize the technology across the length and breadth of the country.

## Background

Public Wi-Fi was tried out in the past by different companies in India. Telecom Regulatory Authority of India (TRAI) has mentioned a number of such companies and organisations in helping create the WANI compatibility. Even the digital giants like Facebook and Google had tried out public Wi-Fi in India. Although, both programs were shut down not too long after the launch therefore unable to make a big impact.

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The trials from TRAI had started in 2017 through Public Data Offices (PDOs) across the country. Before understanding what this scheme could do, it has to be understood what it is. WANI in simple words refers to the scheme that now there is permission from the government to set up public Wi-Fi hotspots for anyone. These hotspots or PDOs could be set up anywhere as a tea shop vendor or an individual in a residential area. For setting up this facility there will not be a need for any registration, license or any other kind of fees. These PDOs will be allowed to provide the internet on their own and lease it from any other telecom and Internet service providers. The model is based on the Public Call office known as PCO used for public telephone facilities in India.

Earlier one had to pay 8 percent of the gross revenue to the Department of Telecom (DoT) in order to apply for PDO license, this fees now has been nullified. The service provider will be registered with the government but the PDOs will not be required to register themselves with the DoT, allowing small PDOs to be set up without hassle. While it is unclear what charges or tariffs users will have to pay for accessing public Wi-Fi but it is expected to cost less than the existing 4G prices which in itself can be a challenge given the fact that prices for mobile Internet has gone down in recent years. The project of setting up optical fibre cable for public Wi-Fi will be funded by the Universal Service Obligation Fund (USOF) along with private players like Airtel, Reliance, Tata, and Vodafone. All the information from PDOs will be compiled and kept with aggregators. These PDOAs will be responsible for carrying out the accounting

and administration work while small shops or other sources become PDOs providing the last mile access especially to citizens living in rural and scarce areas.

## Potential Benefits of the Scheme

In totality this scheme can firstly revolutionize the last mile access. India has remarkably low digital penetration even after all the rise in digital use. Public Wi-Fi can provide the option to students, rural entrepreneurs to carry out their work through digital means. The better internet connectivity will definitely encourage people to turn to digital means.

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Secondly, this scheme can create thousands of employment options similar to the way PCOs had done. Small shops dedicated just to that can be established, existing *kirana* shops, tea stalls can work as PDOs, allowing extra revenue for local people.

This scheme will allow apps like Paytm and others who already have payment systems installed, to show the maps of public Wi-Fi points, automate the payments to the users.

It is seen that despite the improvement in mobile networks, the wired internet works better and offers superior quality since mobile networks at various places can be iffy affecting the quality or the internet. In this regard, public Wi-Fi can have a benefit against the mobile internet. Another benefit is public Wi-Fi can help tourists especially international tourists who at times want to explore far and farther areas in the country but do not want to be out of connection for any reasons such as safety.

## Concerns with the scheme

The biggest concern that people have shown with the scheme is the issue of privacy. Accessing public Wi-Fi, as a lot of people feel may hinder one's privacy and have a negative impact. But in India, the public Wi-Fi at least so far in theory is different from the other countries. It is built on a system similar to the system on which UPI works. The authentication of users can be done from the Aadhar or the Digilocker

just in the way it is done on UPI. The user on their end can access a central KYC system and central data balance. The network operators can then settle the accounting between themselves just as done on telecoms or between banks on UPI. Since the network operators will still be registered with the government, the responsibility lies with them.

The best way to solve this privacy concern is to have a data protection law in context of public Wi-Fi. Indian government had proposed a data protection bill in 2019 according to which technology company were mandated to ask for consent for using private data. The bill was in itself [controversial](#) as it allowed government to access the data from the technology companies. A personal data protection law which clears the levels and process from service provider to the consumers should be put forward along with PMWANI. It would be a proactive way to deal with privacy concerns rather than waiting on for those issues to come up.

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## How DEF Work of Community Wireless Network and Advocacy Led to PM WANI

Since 2002, the Digital Empowerment Foundation (DEF) has been relentlessly working towards minimising the existing digital divide, not just within India rather across the Global South. DEF had been acknowledging the much needed focus that is required on the affordable and meaningful internet access which is crucial to deliver on the promises and opportunities of digital development. This has been achieved and disseminated by the DEF at two levels:

**First** at policy level where DEF has collaborated with big international organisations working towards digital empowerment like APC, A4AI and CIPESA in order to develop frameworks like the [Rural Broadband Policy Framework \(RBPF\)](#) which aims to provide guidance to grapple with the persistent 'Digital Divide', focusing on the challenges faced in rural context and areas. Framework like these are pushed in with a hope that it would help provide a basis and assist the policy makers with their approaches in facilitating the deployment and adoption of better or rather new broadband infrastructure and services in rural areas which are the receiving end of inadequate ICT penetration.

**Secondly** at the ground level where DEF has been providing Digital Literacy training to people in

rural areas and motivating them to help connect their villages with the internet. DEF along with Commonwealth of Learning (COL) rolled out a training course called Barefoot [Wireless Training \(BWE\)](#) course where people from the villages were trained to become wireless engineers and learned to operationalise Wi-Fi even in remote areas. This course has been made available in various modes like text, video, self-learning mechanism so that it can have a wider reach.

DEF was also invited by TRAI to submit the comments on the Consultation Paper on Proliferation of Broadband through Public Wi-Fi Networks in August 2016. DEF's recommendations for Public Wi-Fi reflect the PM-WANI scheme. DEF had recommended the need of simplifying the licensing process and channelizing the process through one institution and making it transparent and open. DEF also recommended that institutions like universities, post offices and railway stations should be encouraged to transform as Wi-Fi hotspots. [DEF Founder & Director Osama Manzar had advocated writing for the Mint in 2016 itself, that public Wi-Fi hotspots could be the modern PCO booths.](#) As it stands now, the PM-WANI scheme is built after the idea of a system of PCOs in the 1990s. A number of DEF's recommendations as stated above reflect in the PM-WANI scheme. DEF recognises the potential of PM-WANI scheme is fulfilling the long awaited last mile access connectivity in India. PM-WANI is a step in the right direction that will contribute to increased digitization in the country and create new economic opportunities for the small vendors. It is about time that India embraces public Wi-Fi beyond apprehensions.









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