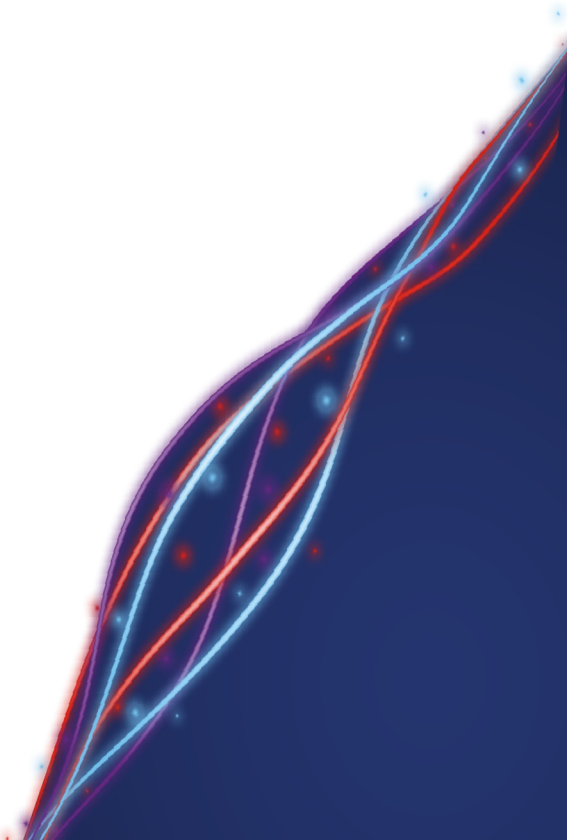
IAFI

ITU-APT Foundation of India

20th Annual General Meeting of the ITU-APT foundation of India (IAFI)



Presidents Annual report for FY 2022-23
Shri Bharat Bhatia, President

Highlights of the year 2022-23

- IAFI supported DOT in the ITU PP-22 elections of Ms. Revathi as member of Radio Regulations Board and India as member of the administrative council of the ITU by:
  - Canvassing support at the APT preparatory meeting for PP-22 by organizing India reception in Bangkok
  - Canvassing support at the PP-22 Romania by organizing India reception with MOS-C
  - Supported India delegation in achieving India's objectives as well helped organizing the India reception at the WTDC in Kigali
- IAFI participated in WTSA conference in Geneva and helped India get a post of chairmanship of SG11.
- IAFI undertook a project for a consumer study of 6GHz Wi-Fi that was funded by our members as well as by the 6USC group.
  - The study was done by CUTS International (Consumer Unity & Trust Society) (https://cuts-international.org/)
- IAFI has introduced weekly reports to all members covering the activities of the society on a weekly basis. These include media stories, events organized by IAFI, consultations responded and contributions from to ITU and APT

ITU’s new elected officials

- Secretary-General: Doreen Bogdan-Martin
- Deputy Secretary-General: Tomas Lamanauskas
- Director of the ITU Radiocommunication Bureau: Mario Maniewicz
- Director of the ITU Telecommunication Standardization Bureau: Seizo Onoe
- Director of the ITU Telecommunication Development Bureau: Cosmas Zavazava

Opening of the Area Office and Innovation Centre in New Delhi, India

Inauguration of the ITU Area Office for South Asia and Innovation Centre in New Delhi on 22 March 2023.

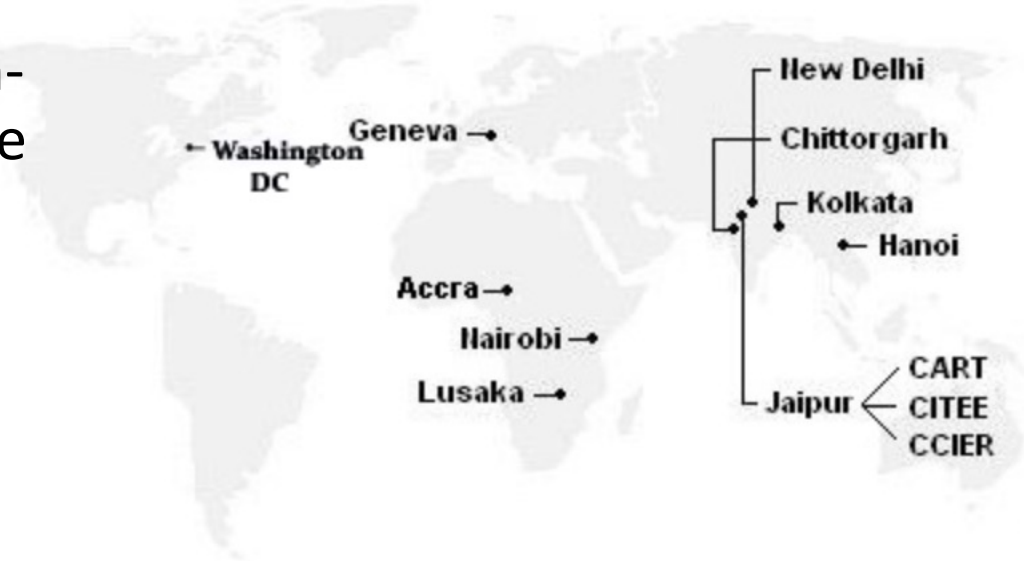
The new Area Office provides an expanded presence for ITU to promote tech and sustainable development in South Asia.

6 GHz Wi-Fi Study Project

- IAFI joined hands with 6USC companies (Apple, Qualcomm, Meta-Facebook, Broadcom, Intel, HP) to help build a national momentum of various stakeholders to encourage the government, both at bureaucratic and political levels to open 6GHz frequency bands for a license exempt use in India and other Asian Countries. The project was funded by 6USC.
- *As a part of this project:*
  - *IAFI set up to support this project and monthly review meetings were held with the stakeholders.*
  - IAFI organised a series of events focussed on 6 GHz
  - As agreed with 6USC, we contacted with CUTS International (Consumer Unity & Trust Society) to carry out evidence-based consumer research/study to address use cases and the utility of unlicensed 6 GHz spectrum from a consumer perspective. The research will also include a study proposal to highlight the current internet landscape while making a case for assessing the unlicensed spectrum needs in India. *(expected completion March 31, 2023).*
- The Report of CUTS has been received and the project has been completed.

Background on CUTS

- CUTS International (Consumer Unity & Trust Society) is an NGO working for the welfare of consumers, from the grassroots to the international level since 1983. They are well recognized and respected in India.
- In the early 1990s, when the Uruguay Round discussions were at a peak, CUTS expanded into trade and development. This lead to substantial growth, as very few NGOs in the South were grappling with these new issues of globalisation and liberalisation.
- Over time CUTS has expanded to include South-South co-operation, to share skills etc. and have now acquired the status of an international NGO, with five overseas centres outside India.



Current Project Status

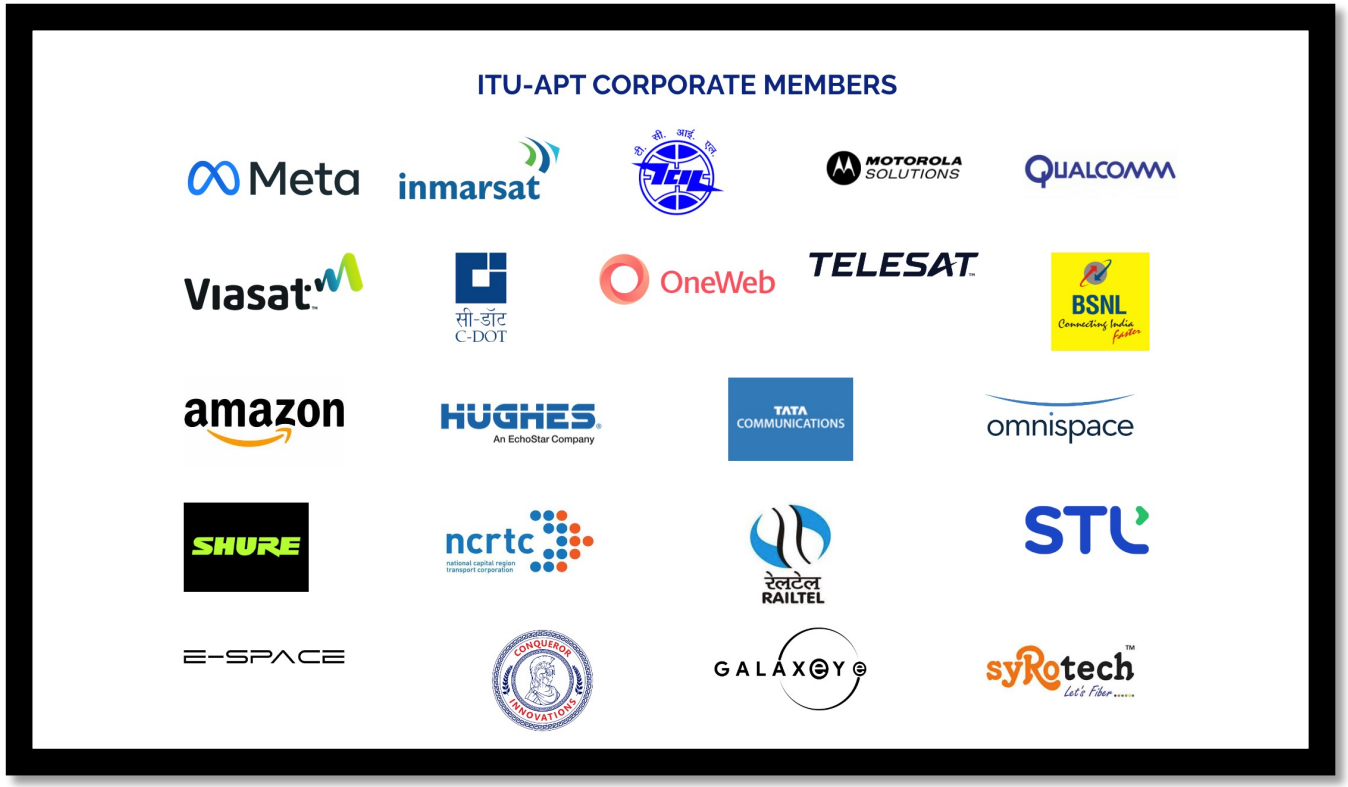
- IAFI has set up an exclusive cell to support this project from November 1, 2022.
- IAFI has entered into an agreement with CUTS to carry out evidence-based consumer research/study to address use cases and the utility of unlicensed 6 GHz spectrum from a consumer perspective. See separate presentation on the current status of this study.
- IAFI is organizing a special session on WiFi at the India Spectrum Management Conference ISMC-2022 with the high-level regulators and Ministry officials.
- IAFI has already conducted a workshop commemorating the World Wi-Fi Day on June 20, 2022.
- Based on our lobby with India's DOT including IAFI meeting with India's Minister of State for Communications, DOT has now set up a committee to conduct an in-depth study and analysis and report regarding the feasibility of delicensing of 6GHz band
- IAFI's proposal to ITU-T to create a new technical Report or Recommendation on "Assessment of Economic impact of unlicensed Local Area Networks on consumers in Asia and Oceania" has been accepted by the ITU.
- IAFI's proposal for creation of a New Task Group in the APT AWG for study on RLANs has been accepted and IAFI President has been nominated to Chair this group.
- IAFI's proposal to ITU-D on a case study of Wi-Fi in India has been accepted by SG1.

IAFI continued to organize National and International events to support IAFI members and DOT

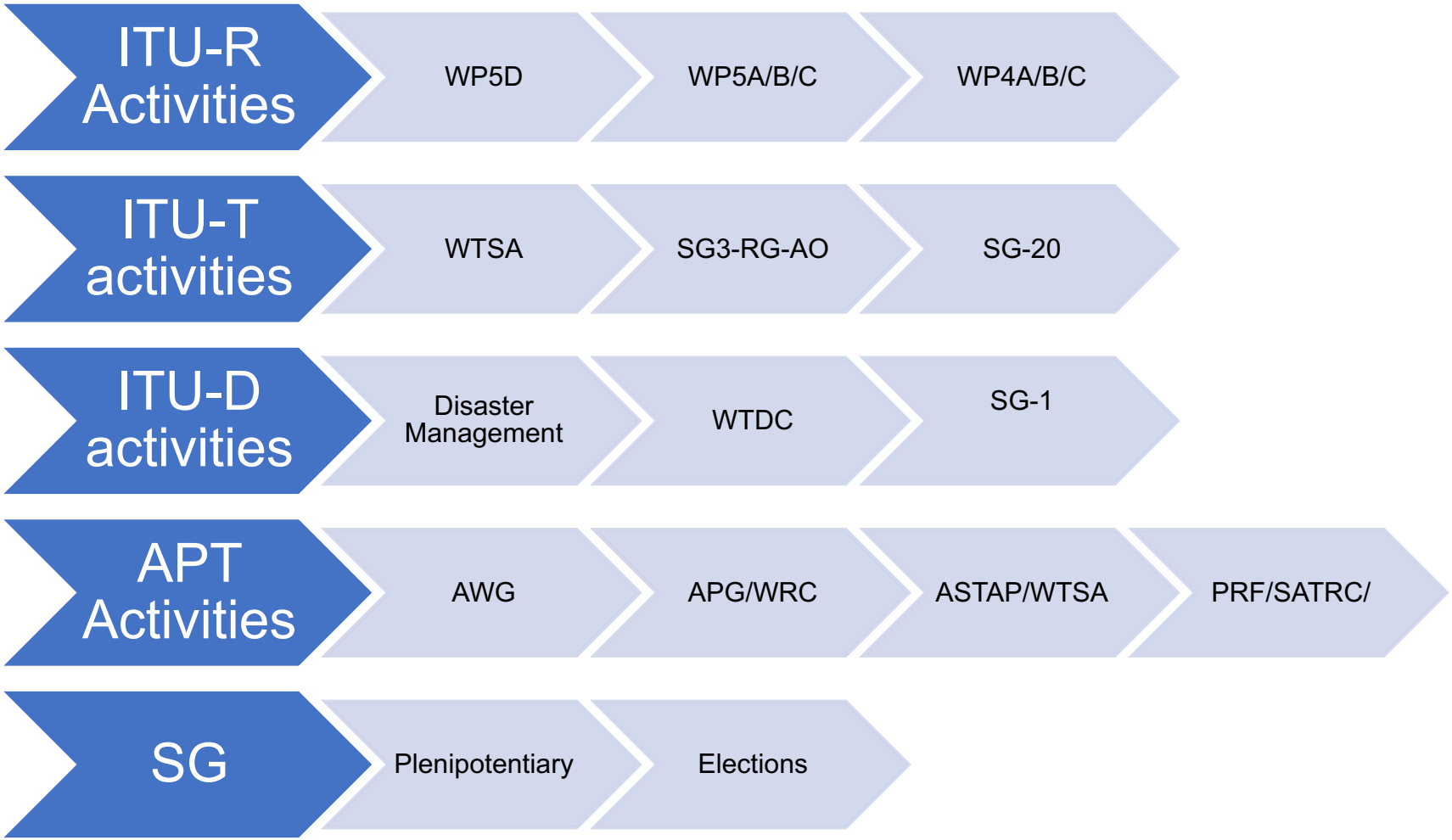
S.No	Event Name	Date
1	Annual Dinner Reception	16/03/22
2	4th National Preparatory workshop for WRC-23	25/05/22
3	India Dinner Reception in Bangkok	03/08/22
4	Workshop on Green Telecom	06/07/22
5	World Wi-Fi Day	20/06/22
6	National Workshop on Spectrum and Regulatory Issues in Preparations for WRC-23	12/09/22
7	PP-22 Dinner Reception in Bucharest	25/09/22
8	19th AGM & Annual Dinner	28/10/22
9	2nd India Spectrum Management Conference	6-7 Dec-22
10	5th National Preparatory Workshop for WRC-23	14/02/23

Increased membership in IAFI activities

- **Present total Corporate members = 22**
- **New corporates added in 2022-23 = 4**
- **Present total Individual members** = 130
- **New individual members added in FY22-23 = 14**



Increased IAFI work in ITU and APT Activities



Key WRC-23 AGENDA items on which IAFI is working during 20-23 Study Period

- New Spectrum agenda for 6G agenda for WRC-27
- Earth stations in motion (ESIM) – Conditions to be further defined for non-geostationary space stations
- NGSO Regulations, including satellite to satellite communications
- High-altitude IMT base stations (HIBS) – The use of high-altitude platform stations as IMT base stations (HIBS) in the mobile service in certain frequency bands below 2.7 GHz already identified for IMT,
- Protecting satellites and Wi-Fi in 6 GHz in India
- Promoting 4.9 GHz for Industrial 5G
- Regulatory issues such as 9.1 C and 21.5

Glimpses of CUTS study

Understanding Consumer Perspectives on the 6 GHz Band: Key Findings & Recommendations for the Way Forward

Project Background

CUTS Project Brief

Understanding Consumer Perspectives on 6GHz Band

Background and Context

The internet has had a pervasive impact on human life and has accelerated a 'connected living' future. This need was further compounded and realised during the COVID-19 pandemic, post which the demand for internet in India increased by over 50 percent. With estimates suggesting the trend to accelerate further,[1] access to high-speed internet has become necessary for socio-economic growth.[2] Internet access has been crucial for services such as online education,[3] healthcare services,[4,5] and financial services (including digital payments and online e-commerce).

High-speed internet can be accessed through broadband services (WiFi). In India, WiFi primarily operates on the 2.4 GHz and 5 GHz spectrum bands. However, experts opine that these spectrum bands are congested and overcrowded.[6] Despite increasing device density and availability of lesser bandwidth for internet usage, survey findings indicated that 2 in 3 broadband users in India struggle with either connectivity issues or lower speeds than what they paid for.[7]

In light of these woes, experts have raised concerns regarding the adequacy of existing bands to support current internet needs and evolving technologies such as Augmented Reality (AR)/ Virtual Reality (VR).

There have been representations by subject experts to open frequencies, particularly in the 6 GHz band, as it is expected that freeing the spectrum would decongest existing spectrum bands and lead to better connectivity.[8] Further, the 6 GHz band may have several additional benefits, including lower latency, better security, and support for several devices such as routers, laptops, and phones.

CUTS Project

In light of the above, it is imperative to understand and highlight consumer perspectives regarding services operating in the existing bands, preferences, possible benefits and expectations from the new 6 GHz band. Accordingly, CUTS is executing a **six-month study (October 2022-March 2023)** to understand and build a nuanced understanding of consumers' current experiences, challenges, expectations and the need for WiFi 6E.

Such evidence-based research complements the existing literature on spectrum availability and future needs in India, helping inform policy/regulatory discourse.

Research Methodology

The study would adopt a bottom-up, evidence-based research approach using primary and secondary research methodologies. The step-wise methodology that shall be adopted for the project is mentioned below:

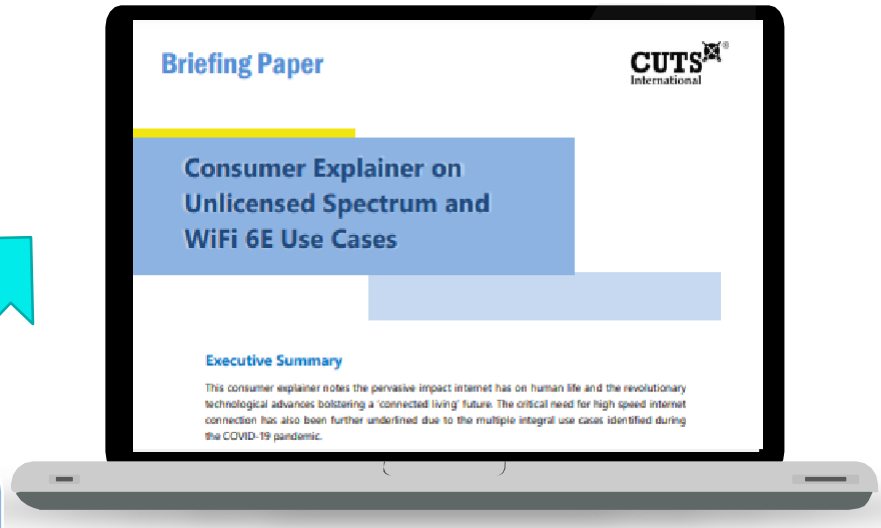
- **Literature Review:** Extensive literature review of research reports, op-eds, international practices, etc., will be conducted on the subject to understand challenges and concerns arising from the existing bands, preferences and expectations from the new band and possible benefits of the 6 GHz band. A comparative analysis of various jurisdictions on making the 6GHz spectrum available and its possible impact on consumers will also be conducted.
- **Gap Analysis:** A gap analysis will be conducted based on the literature review to identify issues requiring validation from primary research and information gaps that need to be plugged in from a consumer perspective. This will also help frame the hypothesis to be tested through primary research.
- **Primary Research:** Focused Group Discussions (FGDs) shall be conducted in physical or virtual mode, with

To understand and highlight:

- **Consumer perspectives regarding challenges & concerns arising from broadband services operating in the existing bands**
- **Consumer preferences, possible benefits & future expectations from 6 GHz band**

Previous Outputs

[Consumer Explainer on Unlicensed Spectrum and Wi-Fi 6E]



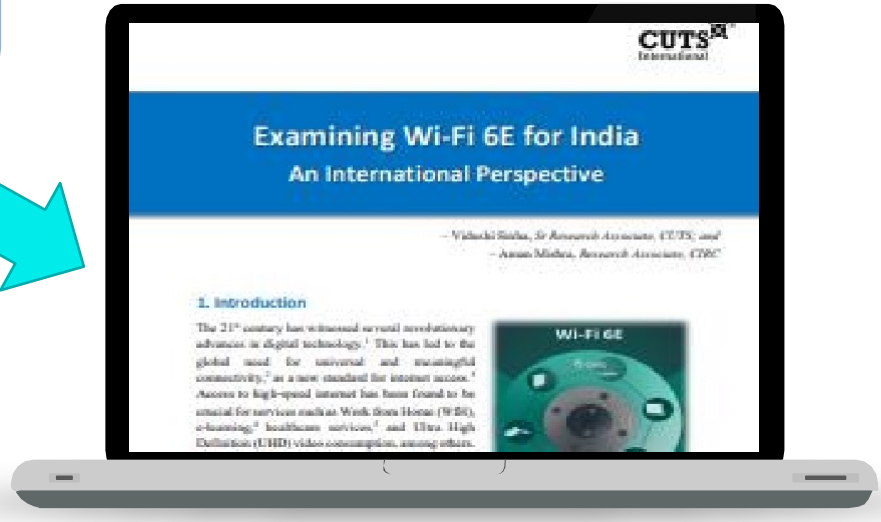
Briefing Paper

CUTS International

Consumer Explainer on Unlicensed Spectrum and WiFi 6E Use Cases

Executive Summary

This consumer explainer notes the pervasive impact internet has on human life and the revolutionary technological advances bolstering a 'connected living' future. The critical need for high speed internet connection has also been further underlined due to the multiple integral use cases identified during the COVID-19 pandemic.



CUTS International

Examining Wi-Fi 6E for India

An International Perspective

1. Introduction

Wi-Fi 6E

[International Comparative Paper]

In-person In-depth Discussion Details

Wi-Fi Penetration & Access

Wi-Fi Connections at Home

52% Have

Don't have 48%

Majority respondents have Wi-Fi. After interactions with those who do not have Wi-Fi, two perspectives emerged:

Rural perspective : (i) Lack of awareness; (ii) Lack of availability; (iii) Costly (Double expense for Wi-Fi & data)

Urban perspective: Office goers access Wi-Fi in office

Perceptions on Public Wi-Fi & PM-Wani scheme

THANK YOU

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