Extending Universal Connectivity in Cambodia
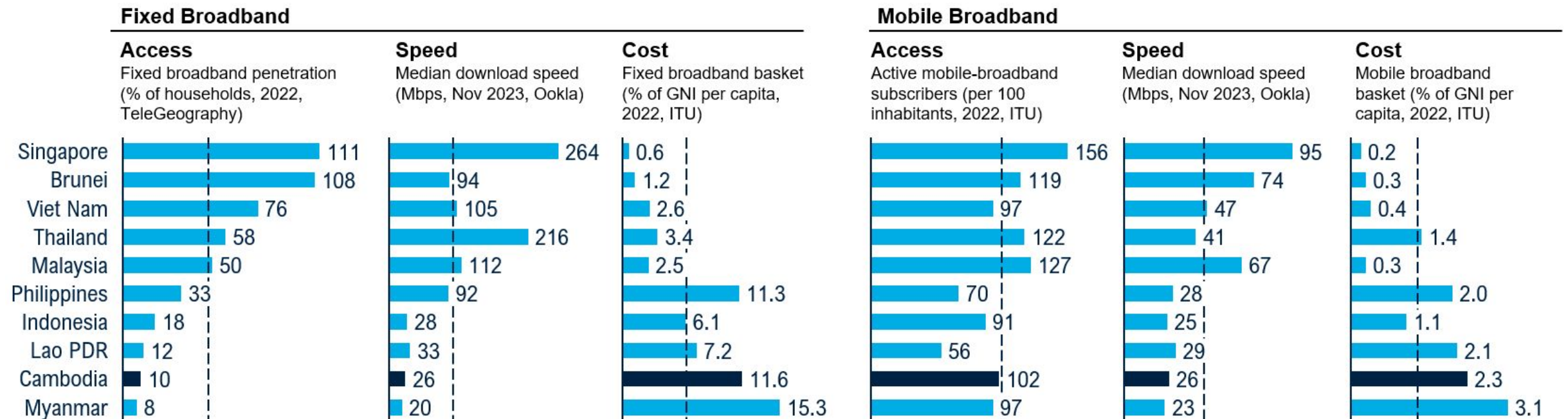
P2C National Roundtable Cambodia

July 8, 2024

WORLD BANK GROUP
Digital Development

Overall digital connectivity in Cambodia is poor, with mobile better than fixed connectivity

Fixed Broadband

	Access Fixed broadband penetration (% of households, 2022, TeleGeography)	Speed Median download speed (Mbps, Nov 2023, Ookla)	Cost Fixed broadband basket (% of GNI per capita, 2022, ITU)
Singapore	111	264	0.6
Brunei	108	94	1.2
Viet Nam	76	105	2.6
Thailand	58	216	3.4
Malaysia	50	112	2.5
Philippines	33	92	11.3
Indonesia	18	28	6.1
Lao PDR	12	33	7.2
Cambodia	10	26	11.6
Myanmar	8	20	15.3

Mobile Broadband

	Access Active mobile-broadband subscribers (per 100 inhabitants, 2022, ITU)	Speed Median download speed (Mbps, Nov 2023, Ookla)	Cost Mobile broadband basket (% of GNI per capita, 2022, ITU)
Singapore	156	95	0.2
Brunei	119	74	0.3
Viet Nam	97	47	0.4
Thailand	122	41	1.4
Malaysia	127	67	0.3
Philippines	70	28	2.0
Indonesia	91	25	1.1
Lao PDR	56	29	2.1
Cambodia	102	26	2.3
Myanmar	97	23	3.1

Cambodia's use of internet has increased rapidly in recent years, but it is limited to urban centers

Internet traffic, GB per capita per month
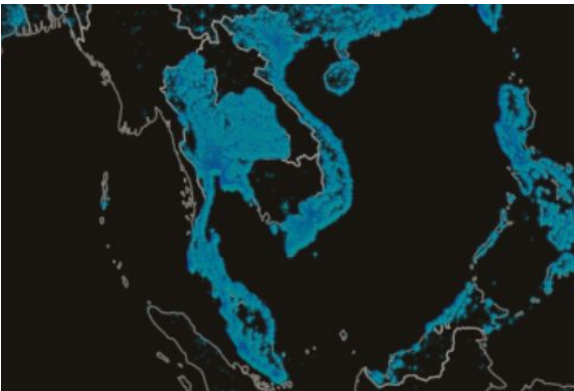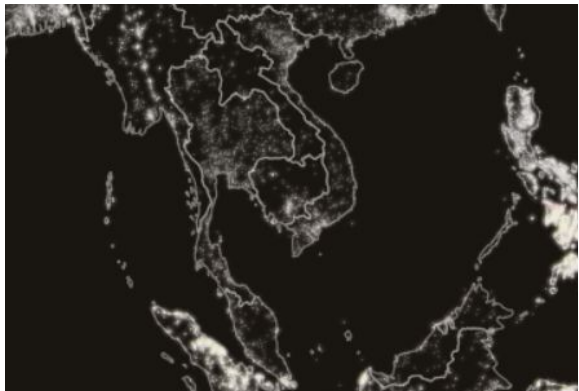(*mobile broadband only*; TeleGeography)

Malaysia
Thailand

Cambodia

Indonesia
Viet Nam
Philippines
Lao PDR
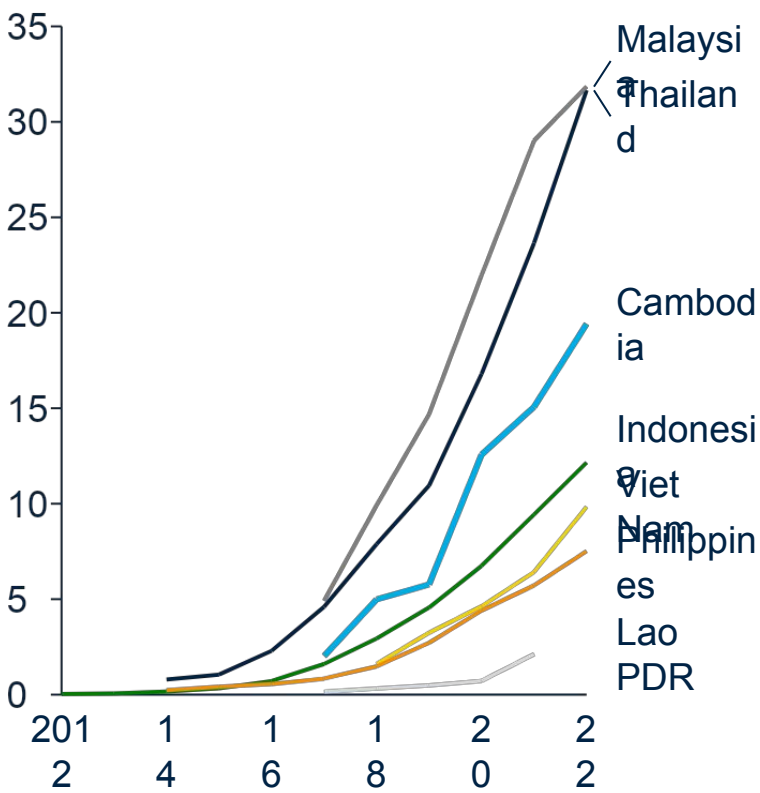
Locations of Speedtest results, low and high speed internet (Q3 2023)

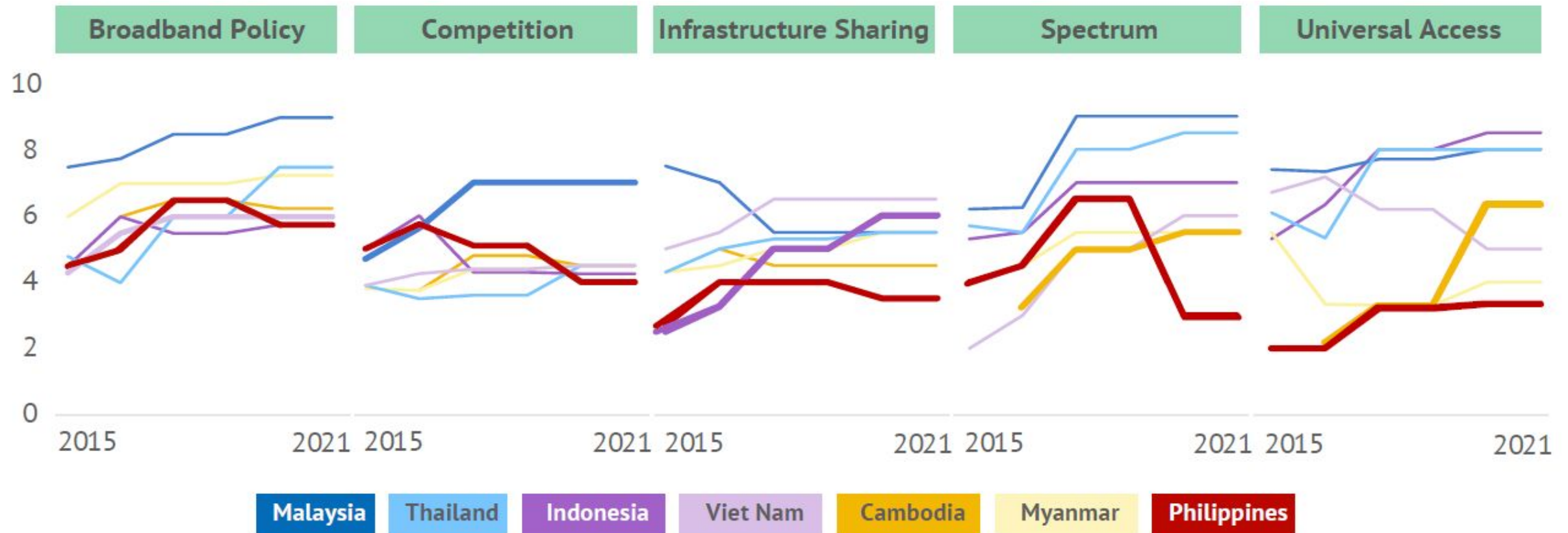*Low speed (<u>less than 5 Mbps</u>)*   *High speed (<u>over 100 Mbps</u>)*
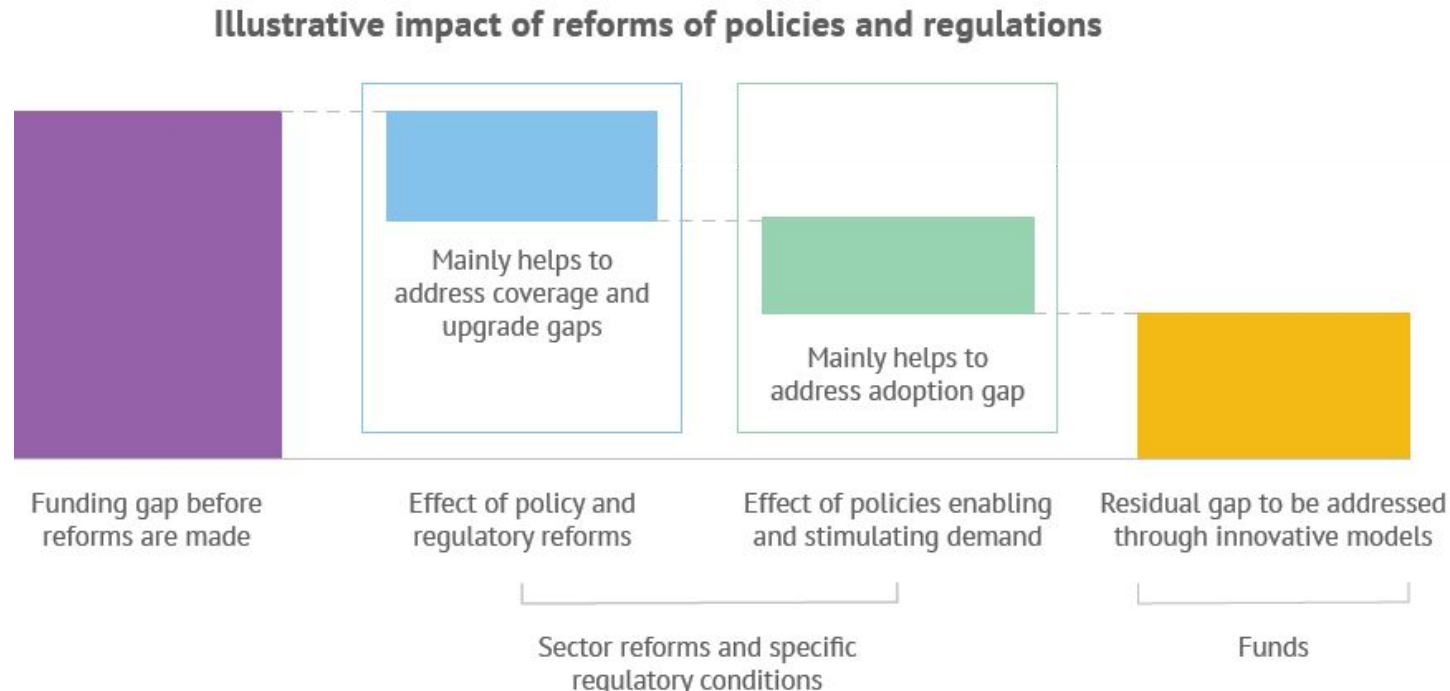
Fixed

Mobile

Cambodia is particularly weak in the policy areas of competition and infrastructure sharing, that are key to affordable broadband

Affordability Driver Index (ADI) Policy Scores and Trends, ASEAN

| Broadband Policy | Competition | Infrastructure Sharing | Spectrum | Universal Access |

Legend: Malaysia, Thailand, Indonesia, Viet Nam, Cambodia, Myanmar, Philippines

Governments face policy choices…

- <u>Technology deployment</u>. A range of possible options (such as fiber, 4G or 5G mobile/FWA, satellite) to choose feasible coverage targets reflecting the level of capacity to be provided, the speed of roll-out, and the cost of network deployment.
- <u>Competition and cooperation</u>. While competition is desirable to create a dynamic and efficient market, demands in remote geographic areas may be insufficient to support more than one infrastructure provider (requiring infrastructure sharing).
- <u>Fiscal policy options</u>. Tensions between maximizing government revenues through spectrum and incentivizing or obliging population coverage to minimize the need for public subsidy to reach universal access goals.

Illustrative impact of reforms of policies and regulations

Mainly helps to address coverage and upgrade gaps

Mainly helps to address adoption gap

Funding gap before reforms are made

Effect of policy and regulatory reforms

Effect of policies enabling and stimulating demand

Residual gap to be addressed through innovative models

Sector reforms and specific regulatory conditions

Funds

Note: Adopted from recent guidance and recommendations from international bodies. Broadband Commission (2021) focused on regulatory interventions while A4AI (2022) and ITU (2023) elaborated more on public investments and fiscal measures to address the residual broadband access gaps.

Case of the Philippines

Cumulative % of population and broadband penetration

- **1** Private — Urban centers where competition in telecom sector should continue to improve broadband availability, quality, and affordability.
- **2** Private upon regulatory reforms — Duopolies not under any effective rollout obligations to allow open access for commercially attractive network rollout by broader market participants.
- **3** Public-Private — Public investments, with complementary regulatory reforms, to address market efficiency gap, expand sustainability frontier and enable private deployment.
- **4** Public — Geographic and socioeconomic conditions in some areas are prohibitive to commercially viable infrastructure deployment requiring missionary interventions.

Key market reforms ◀

Public investments reaching the unserved ◀

Government competency in promoting infrastructure development, digitalizing services, maintaining digital benefits, and managing risks.

PDP Target: 60% by 2028