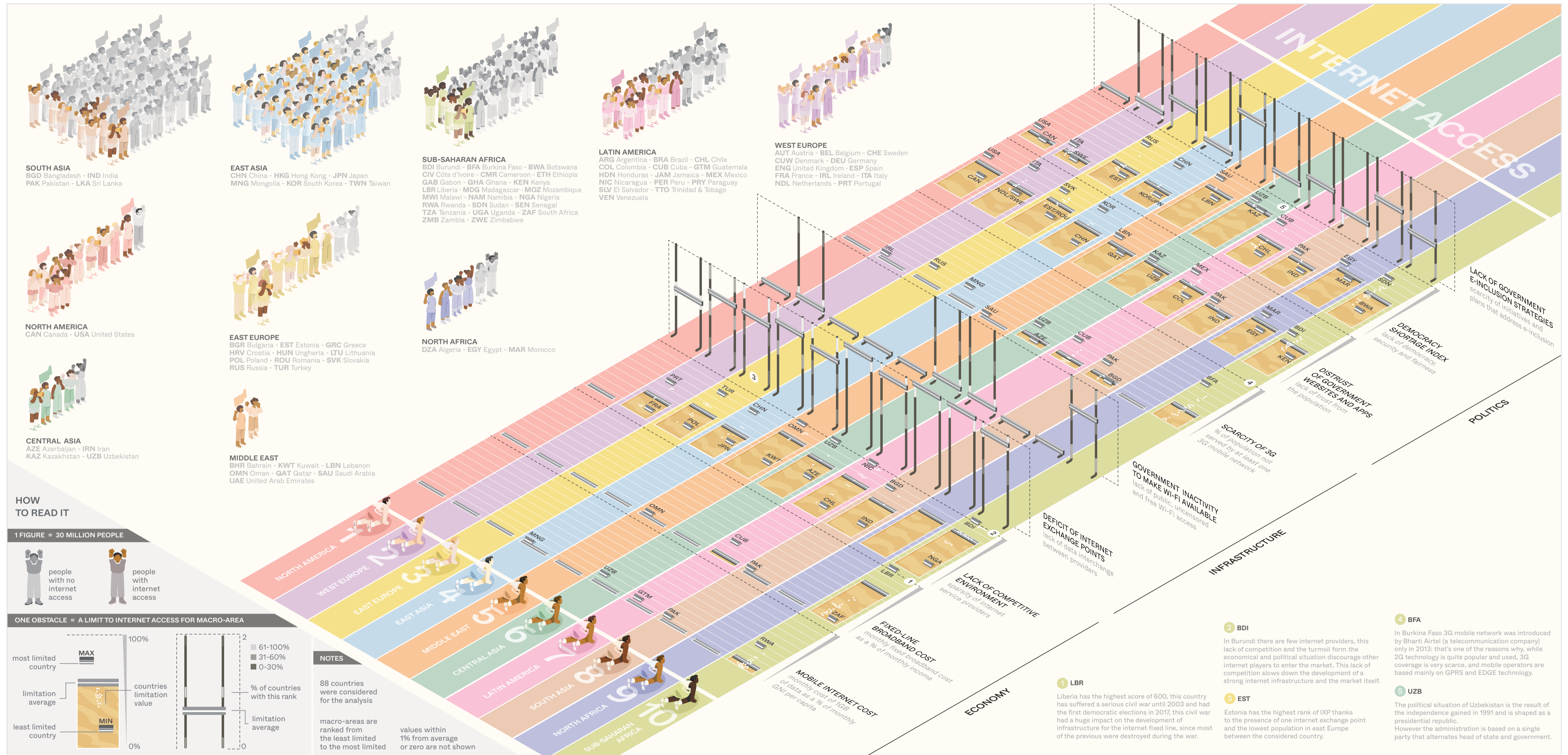# WHICH ARE THE OBSTACLES TO INTERNET ACCESS?

PROJECT BY GROUP 03

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## Macro-area legend

**SOUTH ASIA**
BGD Bangladesh - IND India
PAK Pakistan - LKA Sri Lanka

**EAST ASIA**
CHN China - HKG Hong Kong - JPN Japan
MNG Mongolia - KOR South Korea - TWN Taiwan

**SUB-SAHARAN AFRICA**
BDI Burundi - BFA Burkina Faso - BWA Botswana
CIV Côte d'Ivoire - CMR Cameroon - ETH Ethiopia
GAB Gabon - GHA Ghana - KEN Kenya
LBR Liberia - MDG Madagascar - MOZ Mozambique
MWI Malawi - NAM Namibia - NGA Nigeria
RWA Rwanda - SDN Sudan - SEN Senegal
TZA Tanzania - UGA Uganda - ZAF South Africa
ZMB Zambia - ZWE Zimbabwe

**LATIN AMERICA**
ARG Argentina - BRA Brazil - CHL Chile
COL Colombia - CUB Cuba - GTM Guatemala
HDN Honduras - JAM Jamaica - MEX Mexico
NIC Nicaragua - PER Peru - PRY Paraguay
SLV El Salvador - TTO Trinidad & Tobago
VEN Venezuela

**WEST EUROPE**
AUT Austria - BEL Belgium - CHE Sweden
CUW Denmark - DEU Germany
ENG United Kingdom - ESP Spain
FRA France - IRL Ireland - ITA Italy
NDL Netherlands - PRT Portugal

**NORTH AMERICA**
CAN Canada - USA United States

**EAST EUROPE**
BGR Bulgaria - EST Estonia - GRC Greece
HRV Croatia - HUN Ungheria - LTU Lithuania
POL Poland - ROU Romania - SVK Slovakia
RUS Russia - TUR Turkey

**NORTH AFRICA**
DZA Algeria - EGY Egypt - MAR Morocco

**CENTRAL ASIA**
AZE Azerbaijan - IRN Iran
KAZ Kazakhstan - UZB Uzbekistan

**MIDDLE EAST**
BHR Bahrain - KWT Kuwait - LBN Lebanon
OMN Oman - QAT Qatar - SAU Saudi Arabia
UAE United Arab Emirates

## HOW TO READ IT

1 FIGURE = 30 MILLION PEOPLE

people with no internet access
people with internet access

ONE OBSTACLE = A LIMIT TO INTERNET ACCESS FOR MACRO-AREA

most limited country — MAX
limitation average
least limited country — MIN
100% / 0%

countries limitation value

2 / 61-100% / 31-60% / 0-30%

% of countries with this rank
limitation average
0

### NOTES

88 countries were considered for the analysis

macro-areas are ranked from the least limited to the most limited

values within 1% from average or zero are not shown

## Obstacle axes

**INTERNET ACCESS**

**POLITICS**
- LACK OF GOVERNMENT E-INCLUSION STRATEGIES — scarcity of initiatives and plans that address e-inclusion
- DEMOCRACY SHORTAGE INDEX — lack of democracy, security and fairness
- DISTRUST OF GOVERNMENT WEBSITES AND APPS — lack of trust from the population

**INFRASTRUCTURE**
- SCARCITY OF 3G — % of population not served by at least one 3G mobile network
- GOVERNMENT INACTIVITY TO MAKE WI-FI AVAILABLE — lack of public, uncensored and free Wi-Fi access
- DEFICIT OF INTERNET EXCHANGE POINTS — lack of data interchanges between providers

**ECONOMY**
- LACK OF COMPETITIVE ENVIRONMENT — scarcity of internet service providers
- FIXED-LINE BROADBAND COST — monthly fixed broadband cost as a % of monthly income
- MOBILE INTERNET COST — monthly cost of 1GB of data as a % of monthly GNI per capita

### Notes

**1 LBR** — Liberia has the highest score of 600, this country has suffered a serious civil war until 2003 and had the first democratic elections in 2017, this civil war had a huge impact on the development of infrastructure for the internet fixed line, since most of the previous were destroyed during the war.

**2 BDI** — In Burundi there are few internet providers, this lack of competition and the turmoil form the economical and political situation discourage other internet players to enter the market. This lack of competition slows down the development of a strong internet infrastructure and the market itself.

**3 EST** — Estonia has the highest rank of IXP thanks to the presence of one internet exchange point and the lowest population in east Europe between the considered country.

**4 BFA** — In Burkina Faso 3G mobile network was introduced by Bharti Airtel (a telecommunication company) only in 2013; that's one of the reasons why, while 2G technology is quite popular and used, 3G coverage is very scarce, and mobile operators are based mainly on GPRS and EDGE technology.

**5 UZB** — The political situation of Uzbekistan is the result of the independence gained in 1991 and is shaped as a presidential republic. However the administration is based on a single party that alternates head of state and government.

## ABOUT THE VISUALISATION

This visualisation shows how limitations to Internet access are distributed across 88 countries, classified into 10 macro-areas, whose populations have to overcome different types of obstacles to get online. The barriers are related to economy, infrastructure and politics and are based on selected data: the monthly cost of mobile broadband in relation to monthly GNI per capita, the monthly cost of fixed network in relation to monthly income and the market concentration of Internet providers for economy; the number of network access points in specified areas, the percentage of population covered by 3G network and the public Wi-Fi access rate for infrastructure; the quality of democracy rate, the official initiatives for e-inclusion and the distrust towards government websites and apps for politics. The visualisation represents the average values and distribution for the data expressed in percentage, while considers just the average value for the data which are in a 0-2 rate scale.

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