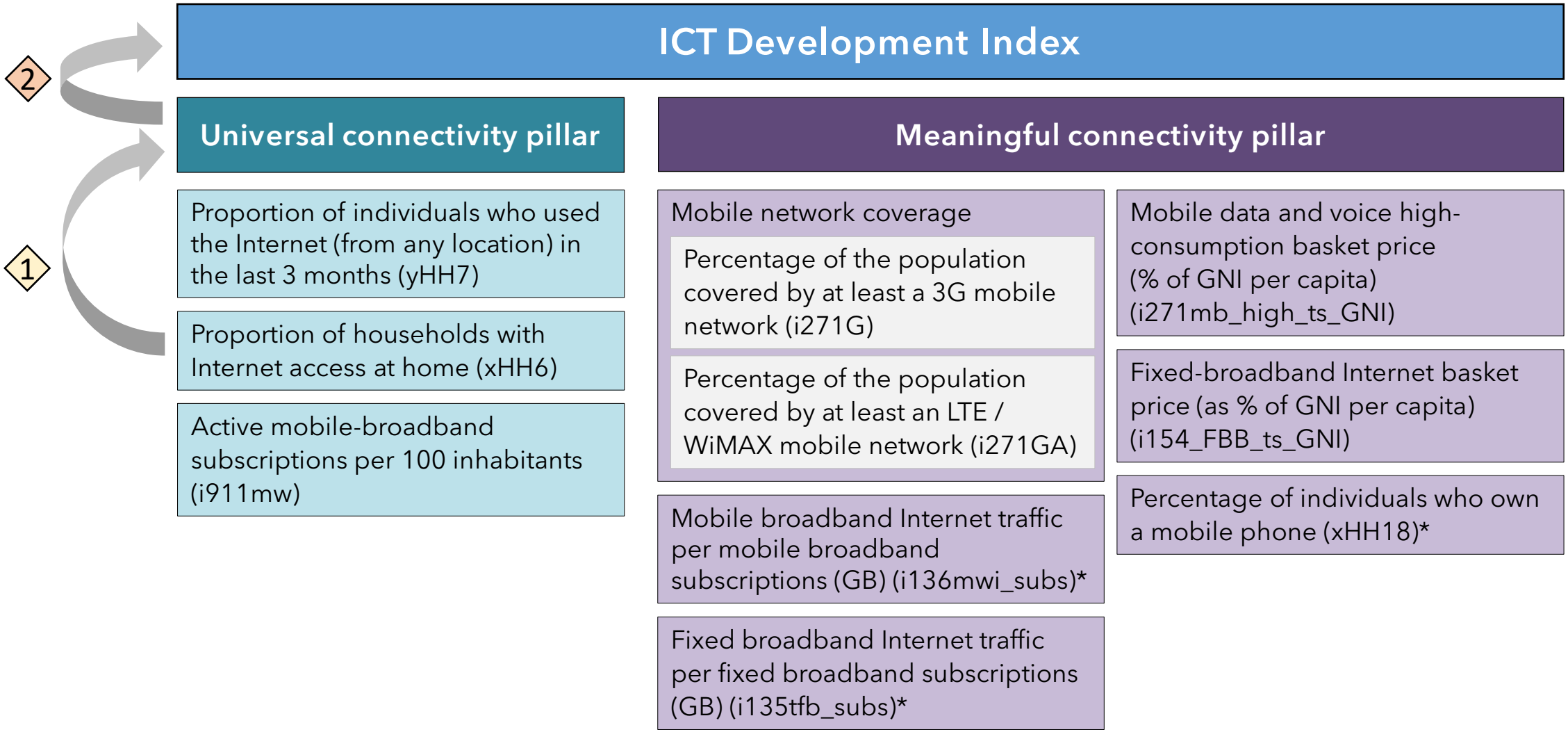
ITUEGTI/EGH2023

Joint EGTI/EGH Session on the IDI
Segment 7

- Weighting
- Reporting results

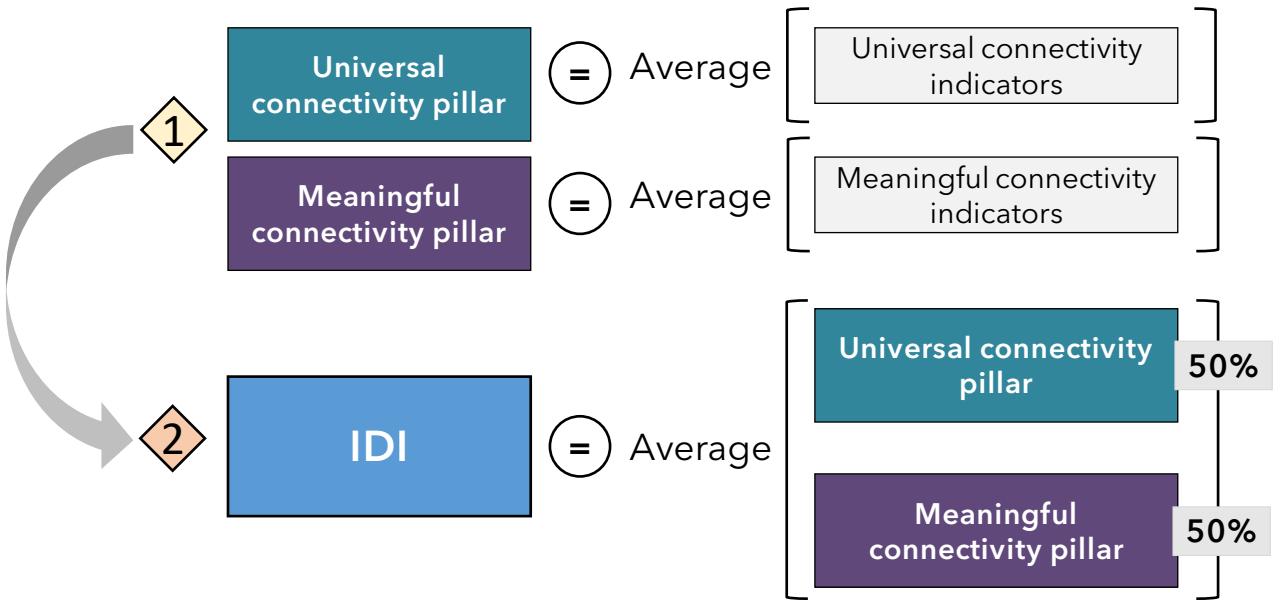
19 September

From indicator to pillar to index: Aggregation in Version 3



From indicator to pillar to index: Aggregation in Version 3

- **In the absence of clear conceptual and statistical justifications, neutral approach of applying equal weights at each level of aggregation is preferred.**



- Weighting scheme mirrors the two dimensions of the UMC concept
- **Step** 1 Pillar scores are the simple average of the indicator normalised scores in each pillar
- **Step** 2 IDI score is the simple average of the scores of the Universal connectivity pillar and the Meaningful connectivity pillar
- Each pillar weighs 50% in the IDI score
- Pillar scores are a balanced summary of the information contained in the indicators of each pillar – each indicator contributes equally to the concept of the pillar
- Statistical analysis does not reject this neutral and intuitive approach

Presentation of the IDI results

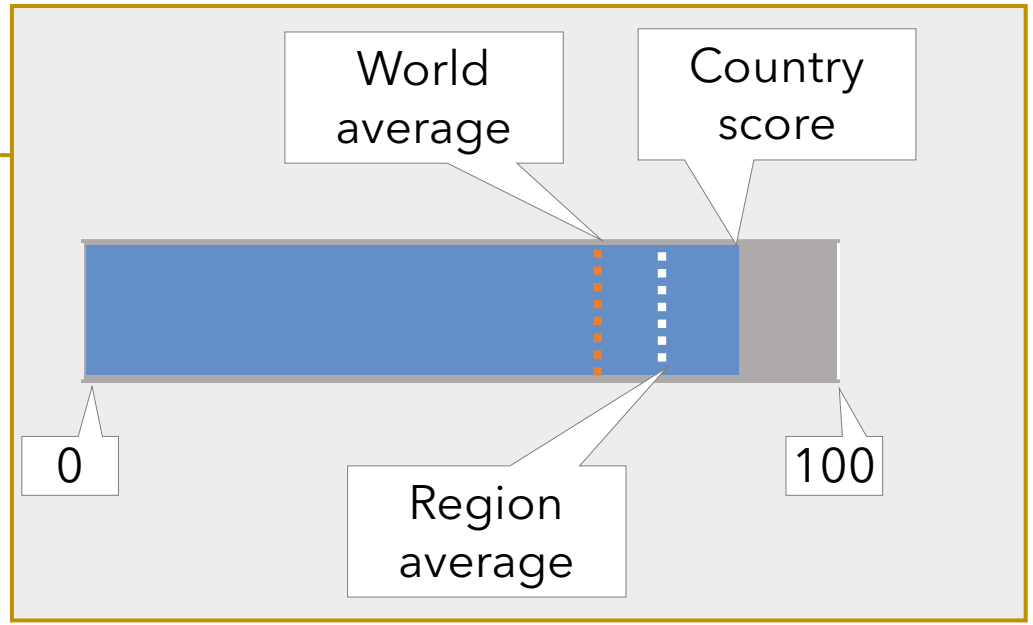
PP Resolution 131 (Rev. Bucharest, 2022) resolves:

3. that ITU should take further necessary measures to establish a valid structure and methodology for the IDI, working through EGTI/EGH, and through formal consultations with Member States[2], that allows the publication of the IDI on an annual basis, **without ranking** provided that there are sufficient valid data to cover a majority of Member States;

[2] If 70 per cent or more of the replies from the Member States indicate approval, the proposal shall be accepted.

Reporting IDI scores: illustration

		IDI score (0-100)	Delta vs prev. ed.
Country A	Region 1	**87.4**	+4.9
Country B	Region 2	**74.0**	+4.3
Country C	Region 2	**43.2**	-0.6
Country D	Region 3	**87.1**	new
Country E	Region 1	**65.8**	+4.8
Country F	Region 3	**42.5**	+3.0
Country G	Region 3	**73.4**	+2.0
Region 1		76.6	+4.9
Region 2		58.6	+1.9
Region 3		67.7	+2.5
World		67.6	+3.1



UMC is not a competition!
Every country can achieve it.

Reporting: Cluster ranking (illustration)

	IDI score (0-100)	Tier
Country I	**89.2**	Tier 1
Country A	**87.4**	Tier 1
Country D	**87.1**	Tier 1
Country B	**74.0**	Tier 2
Country G	**73.4**	Tier 2
Country E	**65.8**	Tier 2
Country K	**50.1**	Tier 2
Country H	**49.9**	Tier 3
Country C	**43.2**	Tier 3
Country F	**42.5**	Tier 3
Country J	**34.5**	Tier 3
Country L	**24.0**	Tier 4

Both in Tier 2, but 24-point gap

Different tiers, but 0.2-point gap

- Countries must be sorted to be clustered
- Choice of bands is arbitrary. E.g.:

  Tier 1: $75 < x \leq 100$
  Tier 2: $50 < x \leq 75$
  Tier 3: $25 < x \leq 50$
  Tier 4: $0 \leq x \leq 25$

- Purely ordinal, distance is lost. E.g.:
- Country *K* only 0.2 point better than Country *H* and yet in different tiers.
- Country *H* and Country B in Tier 2 despite 24-point score difference

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Country H	**49.9**	Tier 3
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Country J	**34.5**	Tier 4
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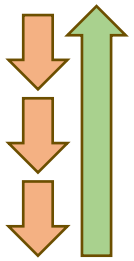

- Tiers based on percentile ranking. Here. Tier1 = 1st quartile, Tier 2 = 2nd quartile…
- Same issues as fixed-band approach. In addition
- Countries 'forced' into different tiers. For countries to progress across tiers, other countries must come down → ~'Zero-sum game'
- Impossible to have all countries to be in Tier 1. Even if all countries have IDI scores above 90 –i.e. near ideal state – countries with the lowest score would still be in Tier 4.

Thank You!