



5G Sub-Group: Summary of Work

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Background



- The 10th Meeting of the ITU Expert Group on Telecommunication / ICT Indicators (EGTI), which took place in Geneva, Switzerland, on 17-18 September 2019, agreed to create a sub-group within EGTI to develop a document which provides suggestion on possible IMT 2020 5G indicators.
- The subgroup worked online and included contributions from organisations based in: Costa Rica, Ghana, Italy, Malaysia, South Korea, Saudi Arabia, Spain, United Arab Emirates, and USA.



Indicators Considered

Criteria for evaluation:

- Relevance
- Feasibly
- Consistency

Indicator	Potential measurement approach
5G coverage (%)	% of population
Assigned spectrum	Measured in MHz
5G subscriptions	Per 100 inhabitants
Peak data traffic	Mbps, per user / per cell
Number of private networks	Per capita / Number of connections / Number of networks authorized
Number of 5G base stations	As a % of 4G base stations
5G FWA coverage (%)	% of population or % of connections
5G smart phones	# sold annually
5G connected devices (enterprise)	# sold annually
Response time/latency	End-to-end response time in milliseconds
Reliability	Measure network availability
Speed	Measured in Mbps

Assigned spectrum for 5G



- ✓ Spectrum allocation for IMT systems is a good overall indicator of health of mobile industry



- Spectrum is technology neutral – assigned spectrum can be used for any IMT generation
- Addressed by other indicators previously adopted by ITU
- Preferable to revisit existing indicators in light of WRC19 changes

Outcome: Do not recommend adoption as new indicator

Number of 5G subscriptions (per 100 population)



- ✓ Builds on existing indicator, *Mobile-cellular telephone subscriptions*.



- Number of 5G subscriptions rarely reported by operators.
- Fluidity of 5G tariffs and subscriptions in some countries means the data is not universally collectable.

Outcome: Consider adoption of indicator at a later date



5G Coverage as % of population



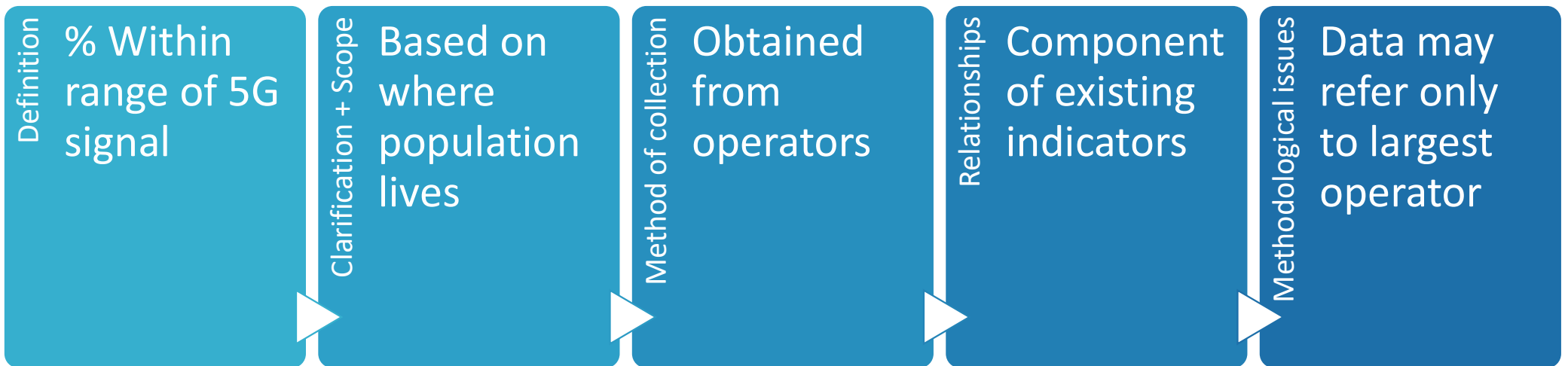
- ✓ Good proxy for progress in 5G deployment
- ✓ Figures often reported by operators or regulators currently
- ✓ Can be achieved by updating language in existing indicator (i271pop)



- Reported figures may refer only to operator with the largest coverage area

Outcome: Recommend adoption as indicator

Proposed indicator: Percentage of the population covered by 5G mobile network





Thank you!



Questions for discussion

- Is the proposed indicator adequate and feasible for tracking the progress of 5G deployments on an international level?
- Does the EGTI agree with the subgroup's rationale for not proceeding the other two priority indicators that were considered?
- Should the 5G subscriptions indicator be considered for inclusion this year?
- Are there any indicators for 5G that are collected at the national level that were not considered by the subgroup that, if collected by ITU, would allow benchmarking at the international level?
- Should the work of the 5G sub-group be extended beyond EGTI 2020 to look at additional indicators for 5G?