Q1: Is the information on wireless broadband [mobile internet] speeds currently available to consumers transparent enough to help them make informed choices?

Answer:
No, it's not. Operators mention "4G", "3G" but they never bother to explain the speed ranges and they always cover themselves with that ubiquitous and outrageous "*Conditions apply" clause. As if they can claim to provide anything for a price and then get away by not doing it.

They should explicitly mention:

1. What are they gonna provide
2. what will be the average minimum speed in clear MB/s (and MB should be Megabytes and not something else.)
3. They should also mention what happens (as in how they compensate for it) if they fail to provide a minimum standard of services or there are more than usual or acceptable outages.

Q2: If it is difficult [for telcos] to commit to a minimum download speed, then could an average speed be specified by service providers? What should be the parameters for calculating this average speed?

Answer:
No, it's not difficult for them to commit to a minimum speed. Actually it's their business strategy not to do that. They want to keep customer always hooked with the hope of a "better speed" with a better/pricer plan and at any level or cost they don't commit to any minimum speed.

Yes, average speed could be specified by service providers.

But I don't think this should be left to service providers. Govt/TRAI should define particular speed bands (technical names for these speed bands e.g what speeds should fall under 4G or what name "3G" should correspond to what speed ranges) and the telcos should use that and that only in their ads and hence product descriptions.

For example Vodafone's Supernet is absurd. They can't even provide 3G speeds and they sell 4G as Supernet.

They can call their service whatever they want but it should also include the technical name recommended by TRAI and not in *T&C somewhere in lowest font-size possible but in clear and bold letters. They should never be allowed to mention only “upto” in their ads. And if upto comes it must come with a minimum speed commitment and again in proper font-size as part of the main advertisement or product description.

This will also help customers decide better on what operators to go for.

But before all that, this should change:

> ***Internet access and has the capability of the minimum download speed of 256 kilo bits per second (kbps)***

This is just, for the lack of a proper but parliamentary world, sad. 256kbps is nothing. Besides the speeds ought to be in MB/s or MBps now. Not in Mbps or Mb/s. 256 kbps is 0.032 MBps. Or if that's too much then at least they should never ever mention anything related to data below Mbps.

Q3: What changes can be brought about to the existing framework on wireless broadband tariff plans to encourage better transparency and comparison between plans offered by different service providers?

Answer:
First of all - transparent and non-predatory pricing. If you check Airtel's data plans you will find these:

Rs 100: 300MB 3G for 14 days
Rs 103: 100MB 3G for 5 days
and then somewhere deep down on the page
Rs 98: 1GB 3G for 28 days

I am not making this up. This is a common site on Airtel's prepaid data plans page or screen. This should not be allowed.

Also, not going for 30 days is extremely corrupt way of trapping customers and taking them for a ride. I mean what is the logic of "28 days plans" instead of 30 days!

So if it is left to telcos it can never be uniform and streamlined.

Now, TRAI must not decide the price and I am sure they will not but what they can do is they can decide the unit by which telcos will sell the data. So they can set certain time frames and they should use only those time durations as in per hour, or per week, or per month, or per year. Or per day. They can't keep on doing 1.75 days, 28 days. Also, this coupled with restrictions on what kind of data speeds and nomenclature telcos can use it might be helpful for customers to compare and decide if implemented right and then enforced.

So telcos not being allowed to set arbitrary amounts will be good for comparison but at the same this should not be stifling.

Also, they should not be allowed to sell different for different states (if possible) since national roaming doesn't apply for data pretty much.

Q4: Is there a need to include or delete any of the QoS parameters and/or revise any of the benchmarks currently stipulated in the Regulations?

Answer:

Yes.

1. Telcos should not be allowed to oversell their capacity. If they are selling 4G in an area (for e.g. 2MB/s) and they can provide minimum 2MB/s at a time to not more than 300 customers then they should not be allowed to simultaneously (A) sell 4G and (B) also have more than 300 customers in that area at the same capacity.
2. They should not be able to decide the speed and availability of services based on whether a consumer is using the data to watch a video, or listen to a song or watching a TV show as long as the data services are paid for.
3. They can't go away with the fact that customer resides away from the tower. They should measure the average speeds available throughout the area of service and measure minimum everywhere and should notify the customer in written/recorded form as of what minimum speeds the customer would receive at that given location. Or upgrade their infrastructure to provide better services to everyone.
4. They should not be allowed to charge more or so in the name of peak time or so. They should not be able to get away with service degradation in the name of peak time either. They should be able to handle peak time. What's the point of selling 10MB/s with a condition "only if 10 users are using our services at a given time".
5. More use of wireless networks also mean more revenue and profit for telcos and this should go in infra upgrade.
6. A medium supports a speed based on how good the infrastructure is that is leveraging that medium. It's just an excuse by telcos. It's like saying diesel and petrol don't support any minimum speeds. Of course they don't. It depends whether you are using that in a race car or in a country engine retrofitted to a bullock-cart.
7. Telcos should not be allowed to inject any kind of ads or any kind of data in the packets. They should not be allowed to temper with the data in the first place.

Q5: Should disclosure of average network performance over a period of time or at peak times including through broadband facts/labels be made mandatory?

Answer:
Yes! Yes! Yes, please!

Q6: Should standard application/websites be identified for mandating comparable disclosures about network speeds?

Answer:
No! This means someone can just say Google.com loads in 2ms and advertise like this. This is wrong. The fact that Google loads that fast is because the website is well made and it's not that particular telcos doing. Average speeds should be average

and it should be. If one wants to use some standard website that TRAI can do a simple thing. Replicate speedtest.net. Something like www.speedtest.gov.in (or nic.in as applicable) and host files of different sizes in data centres across country and telcos can use that to show speed.

Q7: What are the products/technologies that can be used to measure actual end-user experience on mobile broadband networks? At what level should the measurements take place (e.g., on the device, network node)?

Answer:
Apps, either released by TRAI/Govt or recognised parties by TRAI/Govt that measures speed, latencies, outage, disruptions over time and logs it and can send it a database (with privacy consent from user) to TRAI or an independent body. It will really great if it has capacity to complaint directly to regulatory bodies with the capacity for the user to be able to track their complaints and have a record of those.

It should take place on the end user device. Checking speed at the node defeats the purpose of ensuring users getting better service.

Q8: Are there any legal, security, privacy or data sensitivity issues with collecting device level data?

Answer:
Of course there is. But it should be seen as a responsibility and not as a hinderance or challenge. User consent is of utmost importance.

a) If so, how can these issues be addressed?

1. It should be any way connectable to the user,
2. It should be totally anonymized. Even if it is associated with an unique ID it should not have a way to be connected back to the user or it must not be available to anybody other than the regulatory body of the Govt
3. This should have prior consent of the user and it should not be mandatory to use the services. It should also be opt-out (i.e. disabled by default)
4. The code for such tool should be open for audit so that users and experts out in the open see what it does.
5. It would be better to have a framework for this rather than specific tools or apps so that even individual users or firms can leverage that design their own solutions. Something like UPI - BHIM and Chillr can both use it independently. So that there can be a data/QoS measurement tool available to users by for example: Airtel, Google, Vodafone, TRAI and maybe my own app or someone else's.
6. Also, it is important that the terms should not be defined in such way that user finds it difficult to give consent.

b) Do these issues create a challenge for the adoption of any measurement tools?

No. Not by any chance. I mean of course it's a work and hence it will need effort and time. Once the framework is developed and APIs are defined. It can be open for vendors to use the framework and start collecting data with user consent and then use it to analyze QoS.

Q9: What measures can be taken to increase awareness among consumers about wireless broadband speeds, availability of various technological tools to monitor them and any potential concerns that may arise in the process?

Answers:
Most importantly - and I have mention this in another question - it should be very very easy for the user to complain, not only to telcos but also to regulatory body(ies) like TRAI. And the complaint should be trackable. Not like I complained and maybe someone received the complained or maybe not. User should immediately get a tracking number along with other relevant info.

Awareness can be increased using social media or normal ads or TV/radio network. It should be treated as a basic right.

Q10: Any other issue related to the matter of Consultation.

Answer:

1. Please include in the directive that if telcos try to resort to malpractice using caveats or trying to find caveats TRAI can come down really hard on them. So that they understand the purpose of TRAI guidelines is to be followed and not to be overlooked using loopholes.
2. The billing should be transparent and more importantly resolution to billing should be easier for customers. TRAI mandated agencies or Govt agencies that are supposed to protect consumer interest should be easily accessible. As of now there's no clear portal or agency where consumers can go with their grievances. Even if there are there's no easy way to contact these agencies. There are usually phone numbers which are pretty much pointless. Email addresses from where most of the times messages bounce back undelivered. Even if there's any online form consumers don't get any acknowledgement with some kind of complaint/ticket number via email or SMS.
3. Telcos know this and they take advantage of it. They know out of 10000 fraudulent billings (which they term as error) only 5-10 will take the matter to some serious lengths and they are still in profit. The system (like these complaint mechanisms and consumer courts) are designed to not benefit the consumers.
4. If a telco is penalised it should be logged and displayed on TRAI or some other website so that other consumers can know that this is what this telco did and also that they have ways to seek resolution and damages if applicable.
5. These days we get Aadhaar and passports online and if someone has to go to a court seek resolution for a billing problem it's a shame.
6. Privacy should be of utmost importance by the telcos.
7. Ads by telcos should not be allowed to be injected in packets or webpages

served by third party.

In the end I would like to emphasize again that ability of consumers to raise complaints in a easy manner can be a game changer here. Telcos won't be able to bait and switch anymore, or show apathy to customer compaints.