

9th October 2017

## **Broadband Speeds Voluntary Code of Practice**

Response to OFCOM consultation by Andrews & Arnold Ltd.

Andrews & Arnold Ltd (AAISP) are a small ISP with fewer than 10,000 customers. We offer high quality broadband services to business and more technical consumers using ADSL, VDSL and FTTP connectivity. We aim not to be the bottleneck for Internet access to our customers and so we do not see service slow down at peak times.

Like many ISPs we make use of back-haul carriers such as BT plc t/a BT Wholesale and Talk Talk Business who provide back-haul connectivity to us from end connections using Openreach lines. We also contract with BT plc t/a Openreach for PSTN based lines to support broadband connectivity for nearly half of our broadband circuits.

We welcome the opportunity to comment on the latest Voluntary Code of Practice on broadband speeds.

### **Specific consultation points**

We support Ofcom's approach of keeping the code of practice voluntary. If there is to be a move towards a mandatory code of practice, we hope that this would be evidence-based, and encompass only those providers who demonstrate consistent problems with their sales information and line speeds.

We disagree fundamentally with Ofcom's assertion at paragraph 1.12, fourth paragraph, that "The revised codes would require speed estimates to also reflect peak-time congestion, which affects all networks." Peak-time congestion does not "affect all networks", and networks themselves can mitigate much, if not all, peak-time congestion, through appropriate network planning and purchase of capacity. It is misleading of Ofcom to lump together providers which make appropriate network investment decisions for the benefit of their customers, and those which underfund their core networks at the expense of their customers' satisfaction.

4.3/4.4 This does not explain the case of ongoing rolling contracts, as it talks of contracts that are renewed automatically. It is not clear what happens where a contract does not renew, but is simply "ongoing", but we assume from the language of paragraph 4.4 that there would be no requirement to provide after-sale information at any point during an ongoing contract.

4.5(a) This is a good idea in principle. However, I think they should relate to sync speed and not highly protocol dependant file transfer speed - i.e. the speeds quoted are a reduction over sync speed to allow for congestion, not quoting a very different measure of "file transfer speed". As such the tests should be measured by count of bytes actually sent on-the-wire even if the test itself is a file transfer simply intended to "fill the line". The High-

Level Testing Principle does not say how bytes are counted, which is something of an omission, so this may even be the intention. This makes sense if trying to find a metric of congestion, so would mean 100% sync speed quoted if no congestion is measured. Specifically the ratio is described as a “the national contention[sic] coefficient” not a coefficient of “protocol overheads”. Even so, in principle, this is a good way to highlight providers that have not invested in sufficient capacity such that they do slow down at peak times.

4.5(b) This is a good idea, but I think it makes sense to be a sync speed only as reported by the modem. This will allow the guarantee to be backed off against wholesale and back-haul providers and Openreach, which only work in sync speeds. OFCOM must also ensure that such providers offer the data to ISPs and provide the same guarantee to ISPs (not all do). Specifically that lines that do not achieve a guaranteed sync speed can be reverted / uninstalled with no penalty and refund of upfront costs.

4.5(c) This makes the presumption that a low speed is a “fault” and can be “fixed” rather than simply being the speed that one in ten lines can get. If this was based on an actual “fault threshold” it would be a good idea, but again should be easily testable and so based solely on sync speed as reported at the modem. This will allow the guarantee to be backed off against wholesale and back-haul providers who only work in sync speeds.

OFCOM must ensure such providers including Openreach also treat a low sync speed as a fault which requires resolution.. At present, our experience is that Openreach does not take this position and have more of a “take it or leave it” view on the matter, inhibiting our ability to ensure a good outcome for a customer. This needs to be changed as otherwise an ISP will not be able to do anything during those 30 days to actually resolve an issue with sync speed.

4.5(d) We agree that, where a customer is sold a bundle of services, the termination of one can entail the termination of all. However, where a customer chooses to purchase multiple services from a provider, there does not appear to be any evidence justifying a right of termination for other services.

4.5(e) This seems sensible

4.5(f) We are unable to comment on this, as it will depend on how quickly data is available from wholesale and back-haul carriers. If Ofcom wishes smaller ISPs to consider adopting this code, it will need to ensure — and enforce, where necessary — that such data is available readily and free of charge.

## **Specific comments on proposals**

2.1 Speed is not the only factor in buying broadband, and increasingly it is not the most important. This whole CoP is focused solely on speed, but does not consider other, increasingly important, factors, such as latency, packet loss, reliability, etc. If customers are to be presented with a true picture of the quality of the broadband service which they are purchasing, the code of practice must go beyond merely speed..

A1.6 Testing at the router is a good idea, but only possible where the router supports this. This may be an issue for small ISPs and those allowing customers to have any modem they like. I do not believe any of Andrews & Arnold end users have CPE that allows us to do

these tests. If ISPs are required to provide such CPE, this is likely to be a crippling expense to a smaller ISP.

A1.22/A1.25 We consider that the description of the 80th percentile as “maximum” is misleading, and inconsistent with the requirements of Regulation 2015/2120, given that the normal definition of the word would mean 100th percentile.

Whilst a range of likely speeds is probably a good idea to manage expectations, and this being 20-80th percentile may be sensible, if it not sensible to refer to them as “minimum” and “maximum”. A “low” and “high” estimate may be better. It is also somewhat confusing to state “60% of customers get a speed in this range” when in fact 20% of those not in the 60% would be delighted to find they actually get a HIGHER speed. So saying 80% of customers get at least the “low” estimated speed would be clearer, or perhaps “in this range or higher”. Failing that, as an ISP, we could cap lines at the 80th percentile sync speed estimate and then state a whopping 80% of OUR customers get within the 20-80 range and look better than other ISPs whilst actually making our service worse for 20% of people. Perhaps silly, but it highlights how stating 60% is a tad misleading for consumers in this case.

Importantly Regulation 2015/2120 uses the word “maximum” without definition and does not seem to allow a for this to redefined as “80th percentile”. I question if using 80th percentile would be compliant with the directive. Perhaps OFCOM need to consider that matter.

A1.33 If customers are to be reimbursed for up-front charges then it is crucial that the right to exit is reflected through wholesale and back-haul providers and Openreach including refund of up-front charges. Openreach do this now, as do BT Wholesale, but this needs to be all such providers. Also, such guarantees work solely on sync speed. Given that you propose that the minimum speed is adjusted to peak congestion it should be the case that a line will not see a measured speed below the advised minimum even at peak time unless the line is below the Openeach minimum guaranteed sync speed. You have simply moved both figures by the peak congestion. However this has inherent issues with making such measurements. It would be far simpler, and should offer the same guarantee to customers, if the guarantee was specifically a measure of sync speed as reported by the modem. This makes the test clear cut, and ensures that wholesale and backhaul providers and Openreach can all agree the line is below the guaranteed speed advised.

Figure 4: This diagram lacks a few key points

1. Where the customer’s report of slow speed is incorrect and no action is needed at all. This can happen. This is partly why a very clear cut definition is needed such as sync speed at modem. Otherwise a customer may say “I downloaded this file from X and it reported speed Y which is too low” and ISP can see that speed tests using the defined method for testing speed that all is OK. This is partly why we feel it is very important to use sync speed here. The diagram does however need this path of “customer’s report was incorrect and no action is needed”.
2. The diagram appears to leave the option for exiting the contract if the customer has not in fact taken the advice of the ISP. It needs path for “customer chooses not to take suggested action”. Bear in mind, actions may include “use ethernet and not wifi”...

A1.39 “Broadband only” is very common for small ISPs like us. More than half our lines are “broadband only”.

A2.6 Contention is NOT a “slow down”. Contention is simply a reflection of the fact that Internet access and protocol is inherently a shared service. A “slow down” is normally a result of “congestion”. When no congestion is present then contention does not matter at all. Even the quietest road is massively contended (how many cars in UK all of which could choose to use it at once), but it is only “congested” when too many cars cause traffic to slow down. Please can you correctly define “contention” and “congestion” and use correctly throughout.

2.32 is confusing suggesting upload should be in “the same range” as download, when most services have much lower upload speeds. We assume that you mean using the same 20th-80th percentile basis.

3.36 We think a separate consultation on the customer guides would be sensible.

## **Moving provider is not a fix**

The guaranteed minimum is a reason to “exit” the contract and move provider. We feel strongly that this should be a clear test (i.e. of sync speed) that matches the backhaul carriers and Openreach - this is for practical reasons. It actually makes no logical difference as advertising a lower (peak timer adjusted) speed should mean that you only measure such a low speed (even at peak time) if below the minimum sync speed. However, that is a much harder objective test and more debatable with an end user. An indisputable test of sync speed reported by modem is needed.

One way to help is to advise that the guarantee is when sync speed is below X (which at peak time could mean downloads at speed Y). Then make clear that the “test” is sync speed below X.

Another key point to raise here is that lines below guaranteed minimum sync speed are rare, we find. This is odd as we should see 10% of lines below the 10th percentile. However, when this is the case it is usually due to a line or plant/cabinet fault. In such cases “exiting” with moving to a new ISP will not help at all if using same technology (which would often be the case) and would prolong any fault resolution as the new ISP has to start again working with Openreach.

Heavy promotion of the right to exit and move could therefore be detrimental to end users, when actually giving the ISP time to get Openreach to fix the fault would be more useful.

## **Distinction between “speed issues” and “faults”**

The CoP does not distinguish sufficiently between “speed issues” and “faults”. It will often be the case that a low speed is a result of a fault, but this CoP only covers speeds below the guaranteed minimum. If a fault causes a low speed but above the guaranteed minimum it does not seem in scope.

It is not clear how Ofcom intends to distinguish speed issues and faults. We, as a small ISP, use idle packet loss and latency as a key metric to identify a “fault” and would treat a line with packet loss as a fault and not a “speed issue”.

## **One in ten lines are faulty?**

The fact that the guaranteed minimum is based on 10th percentile means that one in ten lines are below the guaranteed speed. That is not a fault, not something that can be fixed, but simply a matter of statistics - the consequence is that one in ten people can constantly exit contracts and engage engineers to no avail. Is that really what we want?

**Is OFCOM saying lines below 10th percentile are actually “faulty”,** i.e. with some expectation that such lines can be “fixed”? The whole CoP seems to be based on this presumption. If so, what happens when they are all “fixed” and the new 10th percentile make a whole new one in ten lines that are deemed “faulty”.

Surely the minimum guaranteed speed should in fact reflect a speed that no line in that location should ever sync below unless faulty - as determined by the characteristics of the line, and experience of the line provider. This would be a “fault threshold” which is what we get for ADSL lines at present. We quite agree that whatever the criteria it should be based on something provided by the modem/line provider, such as Openreach, as a “fault threshold” with a guarantee associated with such a speed - but why pick an arbitrary, and moving target, of 10th percentile which effectively defines 10% of all lines as faulty forever?

Once again, as with previous CoP: **Are OFCOM attempting to say that one in ten lines are always considered to actually be faulty, by definition?**

## **Small ISP**

As a small ISP, we would not be able to do the speed tests. We do not have CPE that can do this our the number of lines.

We operate our network where we aim not to be the bottleneck. This can be seen by independent tests such as thinkbroadband speed tests which show us as fastest FTTC provider with the highest quality metric. (If all providers operated on this basis, this vCoP would not be needed.)

We can see from our monitoring that customers do get their fill line rate when they want, even at peak times, and so are not congested. As such, we should be able to simply advertise the sync speed estimates provided by carriers with no congestion adjustment.

If OFCOM allow this, along with a few changes as suggested, we may be able to adhere to the CoP. If not, we may have to continue to adhere to our own speed code of practice, as we have done in the past.

11th October 2017

Supplementary submission to consultation on Voluntary Broadband Speed Code of Practice

We felt it worth providing a simple one page executive summary of the key *showstopper* with the proposed CoP that should explain what underpins our detailed response and why we feel we cannot sign up to the CoP as proposed. We'd like to help OFCOM get this right.

This CoP seems to try and address two separate areas :-

1. **Better advice**, at point of sale, of likely speeds so as to allow customers to choose between ISPs, with speeds not only based on forecast sync speed, but adjusted for peak time congestion that is ISP specific. This is good in principle.
2. **Fixing faults** which happen to manifest as slow speed.

The problem is the second point. It is not properly covered as it only relates to faults that manifest as low speed, not those causing packet loss, high latency, or frequent re-syncs. It does not cover faults where the low speed is to be above the 10th percentile. It should not be in the "speed" CoP at all but be part of a separate CoP on "broadband fault repair".

The proposed consequences (trying to increase speed, and refunding if not done in 30 days) only make sense if the low speed is considered a fault which can be fixed. The previous CoP says the same. It does not make sense if the line is simple one of the "*one in ten lines that happen to be in the lowest 10th percentile of speed*" and not actually faulty.

What OFCOM are saying is that ISPs have to guarantee a line speed above the 10th percentile of line speeds. Statistically this is nonsensical.

This is rather like comments apparently made by politicians that "all schools must be better than average". By definition, one in ten lines will be below the 10th percentile, always.

To try and give an analogy of what OFCOM are apparently saying, imagine if OFWAT decreed that the lowest 10th percentile of water pressure was deemed below a guaranteed minimum and water companies had to improve the water pressure in 30 days or refund.

I proposed that you remove a fault fixing requirement from this CoP, and if you do consider one, then any *guaranteed speed* is one that is set on the basis that no non-faulty line with the measured characteristics should sync below that speed. It could be one established by industry or modem manufacturers or some technical body, but not simply a percentile.

We do not accept that one in ten of *our* lines are faulty, and as such could not sign up to this CoP. I hope this clarifies the issue. Please do contact me if you need more information.

Adrian Kennard, Director.