



Wholesale Local Access Market Review

Initial proposals to develop an effective PIA remedy

Consultation Response by Colt Technology Services

Non Confidential Version

About Colt

Colt provides world class network, voice and data centre services to thousands of businesses around the world, allowing them to focus on delivering their business goals instead of the underlying infrastructure. Customers include 18 of the top 25 bank and diversified financial groups and 19 out of the top 25 companies in both global media and telecoms industries (Forbes 2000 list, 2014). In addition, Colt works with over 50 exchange venues and 13 European central banks.

Colt operates across Europe, Asia and North America. It recently completed the acquisition of KVH, an integrated managed communications and IT infrastructure services business, with headquarters in Tokyo and operations in Hong Kong, Seoul and Singapore.

Today Colt's network directly connects 207 cities, with a further 49 Metropolitan Area Networks (MANs) and direct fibre connections into more than 22,500 buildings. Also, Colt operates 29 carrier-neutral data centres in Europe and in Asia-Pacific region. Our Global network spans three continents with Colt-owned infrastructure in 28 countries. This allows us to provide services to our customers across 86 countries.

Colt has a wide portfolio of network, voice and data centre services which are delivered with industry leading customer service and security:

- Our network services offer, among others, managed network Services, bandwidth and Ethernet services, fibre infrastructure and wavelength services;
- Voice services comprise Enterprise voice services (such as PSTN and SIP trunking access and outbound calls) as well as wholesale voice services (world-wide call termination via TDM and VoIP interconnection service, Reseller solutions and tools, White Labelled Services and Number Hosting);
- Data centre services enable Colt to provide colocation in carrier-neutral data centres, remote hands' services, disaster recovery space and DC Connect (direct connections to any enterprise within a data centre – including carriers, internet and cloud service providers, internet and financial exchanges, and content providers or distributors)
- Also Colt delivers integrated solutions services using our strong capabilities to integrate products and services and provide solutions to enterprises across the globe.

Consultation response

Colt welcomes the opportunity to respond to the present consultation on Ofcom's initial proposals to develop an effective PIA (Physical Infrastructure Access) remedy. As a pan European operator, Colt uses duct access offers from different incumbents across Europe and, as such, our experience makes us well placed to recommend Ofcom on the best approach to consider to make PIA attractive for large scale deployments.

As shown by Ofcom¹, the UK is far behind in terms of FttP roll-out and PIA's unattractiveness (and unworkability) may be one of the causes of this. We therefore fully support Ofcom's initiative to look closely at the issue. This is a concern we have been raising for several years through our different submissions and exchanges with Ofcom².

PIA requires root and branch reforms if it is to be a workable product with the desired impact. We consider that the most important changes required concern the scope of the product. The most obvious issues (contributing to low take up) come from the restrictions included in the product definition. The presence of such restrictions is a clear difference with other European Countries where unrestricted workable duct access offers are in place and where FttP is rolled out extensively³.

In this context Colt highly supports PAG's (Passive Access Group) response to this consultation and therefore refers to the points made in the response:

1. An effective PIA remedy must be provided on an EOI (Equivalence of Input) basis;
2. The remedy requires an effective pricing regime and for this Ofcom needs to undertake the detailed work required to prepare a robust charge control;
3. For PIA to be workable product, a CP (Communication Provider) must be able to use it in a way which reflects its own network topology choices.
4. Usage restrictions must be relaxed to ensure the remedy is effective.

While the first and second are important, the "make or break" issues are the third and fourth.

While largely referring to PAG's reply for this consultation, we would like to reinforce one point in our present reply: the necessity for Ofcom to opt for the "any usage" option. What follows will

¹ Figure 1 of the present consultation

² https://www.ofcom.org.uk/_data/assets/pdf_file/0031/58783/colt.pdf

https://www.ofcom.org.uk/_data/assets/pdf_file/0013/33160/colt.pdf

³ At the end of Q3 2016:

- In France, , about 41,623 km of ducts were leased by alternative operators in order to deploy FTTP. (See: <http://www.arcep.fr/index.php?id=13415&L=0>.)
- In Spain, FttP coverage reached about 70% of homes passed.
- In Portugal, FttP coverage reached about 79% of homes passed.

therefore focus on why this is the only right approach to make duct access work efficiently and rapidly and foster large scale FttP deployments in the UK.

Need for PIA to be allowed for any usages

Ofcom proposes two different options in terms of relaxing the usage restrictions on the PIA product:

- Allow PIA for “mixed usage”. Ofcom considers there might be some challenges in order to implement such an approach and suggests CPs to provide specific business plans on their intended use of PIA in order to make sure PIA is effectively used for “mixed” (large scale) deployments.
- Allow PIA for “any usage”. Ofcom recognises this is a more practical approach but also acknowledges there are risks associated with this option. They are the following:
 - **“Risk for BT’s common cost recovery:** *In Annex 4, we illustrate the possible cost recovery implications for BT of allowing any use of PIA in the local access area. We have looked at the services which we think may come under greater competitive pressure as a result of relaxing usage restrictions, and the costs associated with these services based on 2014/15 RFS data. If we assume that a PIA based competitor won a third of BT’s relevant set of leased lines connections, the cost at risk for BT could be up to £80m per year (although it would most likely be below such a figure). To place this in context, a cost recovery shortfall of around £80m a year, if recovered across all of Openreach’s residential exchange lines, would imply an increase of £0.30 in monthly rentals.*
 - **Inefficient use of scarce resources:** *the availability of duct and pole capacity to support competing ultrafast broadband networks, especially where it is already limited, may be at higher risk if providers use up the limited spare capacity for leased lines only.”*

Colt strongly believes risks associated to the “mixed usage” option will make the product unattractive and unworkable, the exact opposite of the intention of the current consultation. By contrast, risks associated to the “any usage” option can be managed through the implementation of appropriate engineering rules and through a distinction of leased lines deployments in pricing and a proportionate cost reallocation. We explain this further below.

Risks related to a “mixed usage”

Colt considers Ofcom underestimates the risks associated with opting for “mixed usage”. In order to implement this option Ofcom suggests CPs should provide their business plans to BT in order to

prove they will use PIA “to deploy network to residential consumers at scale”. This requirement will undoubtedly make PIA unattractive: this clearly increases the level of complexity required to use the product and also evidently adds costs and risks to CPs’ intended investment.

Indeed business plans are very highly sensitive information and giving access to those to BT, an operator which is already involved in FttP deployments, represents a high risk. Also this implies CPs to make commitments they would not otherwise have to, inadvertently increasing their risk. Finally the level of information needed to be provided and to be checked would be an administrative burden CPs would not be willing to support.

If Ofcom is really committed to their objective of giving CPs incentives to deploy ultrafast broadband, they would not consider applying such option.

Furthermore, Colt’s experience of using duct access across Europe has proven that the inherent complexities in using third part ducts are complex enough already. The trend among regulators is towards simplification. The requirement to submit a business plan (to a competitor) would in our view render the product wholly unworkable.

The net result of the mixed usage option is that business-only providers such as Colt – who have chosen their strategies for valid reasons – would never use the product and would thus be excluded from the market. Business-only operators have an important role to play in the overall supply chain, providing (among other things) wholesale access and backhaul to residential and mobile suppliers. It is unconscionable that Ofcom would seek to manipulate the market and pick winners in such a way.

In conclusion, the mixed usage option would fail.. To our knowledge, there is no international example of similar restrictions – and its good reason.⁴

Risks related to an “any usage”

Colt recognises risks associated to an “any usage” option, and stated above, exist. However we believe those risks are overstated and can be managed.

Capacity concerns

We recognise this is a reasonable concern from Ofcom however we believe this concern can be addressed by implementing network engineering rules. For example, in France, to address this risk,

⁴ See PAG reply and specific examples on France, Italy, Spain and Portugal.

in the 2011 (old market 4⁵) review, ARCEP mandated Orange to implement engineering rules aiming at two objectives:

- Minimise constraints for the deployment of shared fibre networks (FttH/P),
- Distinguish other types of deployments by implementing additional constraints to ensure those deployments don't pre-empt FttH deployments.

This resulted in ARCEP requiring CPs deploying leased lines to leave a specific amount of available space when deploying fibre using Orange's civil engineering infrastructure. This space has to be equivalent to the size of the CP's own occupied space if the deployment is done using duct access, or twice that space using pole access. ARCEP also imposed further rules which are similar to Ofcom's suggested measures regarding enabling works (clearing blocking ducts). We believe such measures are reasonable and sufficient to address Ofcom's concerns, especially considering the use of PIA to deploy leased lines is not expected to be as high as Ofcom is predicting.

We expect PIA's take up for deploying leased lines to be lower than Ofcom believes it could be. Colt, for example, sees PIA as a way to invest in new areas and not as a way to migrate existing leased lines to PIA. This is the way Colt uses duct access in other European countries and there is no intention of changing this approach if duct access were to become a workable product in the UK. In other European countries, Colt uses duct access only over (relatively) short distances⁶ as it requires our network to be already close by to the given path. Using third party ducts requires us to connect our manholes to those of the provider – often at substantial cost, thus ensuring such usage is only viable when multiple (rather than single) connections are foreseen. There is no basis in our experience for the concern about widespread cherry picking, because the cost of picking a single cherry is too high. This is why, in countries where duct access is available, Colt and others only use it for strategic expansions and not for individual connections, and also why the theoretical concerns about cherry picking has never been realised in practice.

BT's cost recovery

Ofcom is concerned allowing PIA for any usage is a risk to BT's cost recovery. Indeed if CPs use PIA to deploy leased lines, this may reduce the volumes of leased lines sold by BT, threatening its ability to

⁵ In October 2014, the Commission changed its list of relevant markets. Market 3a "wholesale local access provided at a fixed location" is the market on the new list that corresponds most closely to Market 4 in the 2007 revision. For convenience, we refer to the nomenclature that was in use at the time the decisions related to access to civil engineering were made, rather than that in use today. That is to say, we refer to the Decision and analogous decisions elsewhere in the EU, as Market 4 decisions and not Market 3a http://ec.europa.eu/information_society/newsroom/cf/dae/document.cfm?action=display&doc_id=7118

⁶ [Confidential.
]

recover its costs. In practice, Colt considers that this risk is overstated given BT's extraordinary levels of profitability in business connectivity markets in recent years, which suggest Ofcom's regulatory approach is, if anything, too generous to BT. Furthermore, as explained above the way in which CPs will use PIA is unlikely to result in significant changes to BT's cost recovery given duct access is not intended to be used to migrate leased lines to duct access. Nonetheless, Ofcom could address this issue by reviewing the impact on BT's pattern of cost recovery, but this would need to be considered in light of BT's existing and ongoing over-recovery. Ofcom would then need to ensure the WLA market does not bear costs which should be allocated to other markets – passive or active, and regulated or unregulated.

Finally another way to address this concern would be to have a different price for leased lines deployments than for other types of deployments. Such an approach has been adopted in other European countries like in France where FttP deployments are priced according to distance and space but only up to a given concentration point; after that point, the price only depends on the number of lines. In comparison, duct access for leased lines deployments is always distance and space based.

Colt's best practices of experiencing duct access across Europe

Colt's experience in working with passive infrastructure access remedies across Europe⁷ has afforded us considerable experience of the factors that most affect the success of passive infrastructure access remedies. Our experience is that at least the following must apply:

1. **No limitations on end use.** There is no provision in the scope of Market 4 (or the explanatory text) for the access provider to discriminate between access seekers on the basis of the downstream use. Nor is/was there any such provision in the Decision. Any such restriction adds a level of complexity to the product making it unattractive and unworkable.
2. **Any-point-to-any-point connectivity.** To avoid objectively justified technical or operational reasons, the access provider should not be able to limit the points of ingress and egress into the network. Allowing the access provider to limit the ingress and egress points allows it to institute a *de facto* limitation on end use, even if there is no *de re* limitation on end use in force.
3. **Access should be agnostic as to the segment of the access provider's network that the facility belongs.** While it is acknowledged that PIA is intended for the deployment of access networks, this does not imply that the access seeker should be denied access to a facility,

⁷ Especially in France, Italy, Spain and Portugal.

merely because the access provider has classified the facility as belonging in its backhaul segment. The classification of a facility as “access” or “backhaul” is necessarily arbitrary and only relative to a particular network architecture. It is quite possible for a given network route to belong in the “backhaul” segment of one network while belonging in the “access” segment of another network.

4. **Appropriate tools and processes.** According to the experience that Colt has from the European countries where access to ducts is a proven and well working wholesale service, it is imperative that the product offer contains an (electronic) ordering interface, together with fit-for-purpose processes and support systems. It is also necessary that the support systems allow access seekers to interrogate the duct owner's inventory in order to plan deployment. The inventory should contain the best available information on, at the very least, duct routes and manholes accurate location but also on current space availability. An example of a well-functioning OSS framework is in Portugal, where the inventory database is so accurate that an operator can begin to deploy their fibre cables into ducts, five days after the initial request, provided that the support system shows that there is available capacity for the requested route. The product should therefore include functional interfaces and processes, and a support system for access to the database over its ducts. Colt believes that the creation of a non-discriminatory reference offer should be the most appropriate approach.

An unrestricted PIA product to foster Europe's digital economy

As already explained through our previous submissions to Ofcom, while Colt is only active in the leased lines market, there are strong linkages between leased lines and WLA markets. For example competition in the backhaul leased lines market is an ancillary input to creating competition in the WLA market. Also, leased lines deployments can be underlying inputs to provide connectivity to end users (residential or business) which is one of the fundamental reasons for regulating WLA markets in the first place.

[Confidential.]

]

If “mixed operators” had access to PIA, they could respond to this demand while Colt could not. This would unfairly and negatively discriminate against Colt and distort competition. Moreover this example shows the current restrictions on PIA are not in line with the recent EC’s publications aiming at encouraging Wi-Fi connectivity across Europe.

As part of the review of the EU regulatory framework for electronic communications, the European Commission has published a communication⁸, “Communication for a competitive Digital Single

⁸ <http://www.t-regs.com/wp-content/uploads/2016/09/1-2016-587-EN-F1-1-Communication-Connectivity-for-a-Competitive-Digital-Single-Market-Towards-a-European-Gigabit-Society.pdf>

Market – Towards a European Gigabit Society” where it states the following: “Internet access via Wi-Fi easily connects multiple users, and many local authorities already give free Internet access in public spaces. **The Commission wishes to support and encourage the provision of free Wi-Fi access to citizens in all public services (e.g. public administrations, schools, libraries, health centres, museums, public parks and squares) to better integrate communities in the Digital Single Market,** to give users a taste of Gigabit society, to improve digital literacy and to complement the public services provided in those locations.”

As a result, we urge Ofcom to remove restrictions on PIA so it allows “any usage” and becomes an enabler to bringing Gigabit connectivity to UK citizens.