

Gibtelecom Response to the Public Consultation 01/08

Network Termination Points

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Gibtelecom Limited Suite 942 Europort Gibraltar

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In response to the public consultation on network termination points published by the Gibraltar Regulatory Authority (GRA) on 7^{th} April 2008 (Public Consultation 01/08), Gibtelecom Limited (Gibtelecom) is pleased to present its comments.

Question 1: Do you see the need for the Authority to define the network termination point? Please give reasons for your answer.

The Authority does need to define the location of the network termination point (NTP) in housing estates and other multi-occupant buildings as there are evidently conflicting views and the precise physical location of the NTP has legal consequences. As for what the definition should be, Gibtelecom's firm position is that the NTP is the end point of the network as seen from the subscriber's point of view and thus is logically and legally located in the end-user's premises, (i.e., the apartment or house) and nowhere else. The NTP should not be confused with a point of access or point of connection at which a network operator connects to the in-building wiring system (a local sub-loop in an apartment block). We explain below in more detail the basis for our position.

Legal Significance

Concerning the legal significance of a NTP definition, the NTP in general terms represents, as stated in the Consultation document, the limit of the GRA's authority to intervene and regulate electronic communication networks (ECNs) and services (ECSs). This is underscored in the EU Universal Service Directive 2002/22/EC at Recital 6: "The network termination point represents a boundary for regulatory purposes between the regulatory framework for electronic communication networks and services and the regulation of telecommunication terminal equipment." The NTP also marks the edge of the GRA's authority over private networks and services, as well as public ones whether operated by significant market players (SMPs) or non-SMPs. In specific terms regarding the local access network, the NTP represents the limit of the scope of regulation of the local loop under the EU Unbundled Local Loop Regulation 2887/2000 (ULL Regulation). Article 2(c) of the ULL Regulation defines the local loop as "the physical twisted metallic pair circuit connecting the network termination point at the subscriber's premises to the main distribution frame or equivalent facility in the fixed public telephone network". The NTP also frames a statutory right given to all fixed public network operators to wire up a residential building to gain access to end-users. Section 3.2 of the Consultation document refers to "the statutory right of fixed public network operators to install wiring systems in the common parts of buildings to serve residents". This right to install in-building cables must be seen as extending up to the NTP.

Basis for setting NTP location

The grounds for setting the location of the NTP at the end-user's premises in a multioccupant building are found in basic provisions in several measures in the current EU telecommunications package.

- The Access Directive 2002/19/EC defines the local loop in its Article 2(e) as "the physical circuit connecting the network termination point at the subscriber's premises to the main distribution frame or equivalent facility in the fixed public telephone network."
- The ULL Regulation essentially repeats this definition with a few more details in Article 2(c): " 'local loop' means the physical twisted metallic pair circuit' connecting the network termination point at the subscriber's premises to the main distribution frame or equivalent facility in the fixed public telephone network."
- The Universal Service Directive 2002/22/EC defines the NTP in Article 2(e) as "the physical point at which a subscriber is provided with access to a public communications network; in the case of networks involving switching or routing, the NTP is identified by means of a specific network address, which may be linked to a subscriber number or name"

The NTP is defined in the Universal Service Directive from the subscriber's perspective. It is the physical point at which the subscriber is provided access. His connection point is where the incoming wire is still defined as part of the public network, not as part of a private network. This interpretation is reinforced in the Access Directive and the ULL Regulation when there is added emphasis that the NTP is at the subscriber's premises. In a multi-occupant building, a subscriber's premises is his apartment, not the common areas. The statutory right of every public fixed operator to install wiring in the common parts of the building further buttresses a definition of NTP as being in the end-user's apartment and not in any other part of the building.

ULL Point of Access versus NTP

While the NTP remains anchored in the end-user's premises, an alternative network operator's access to the end-user currently serviced by Gibtelecom (including an in-building wiring system [IBWS] provided and operated by Gibtelecom) can be obtained through local loop unbundling or, if a basement multi-distribution frame (MDF) room can be established, through sub-loop unbundling. A connection between the basement room and the end-user's apartment clearly falls within the terms of the 2002 Access Directive's definition (at Annex II (a)) of the local sub-loop: "a partial local loop connecting the network termination point at the subscriber's premises to a concentration point or a specified intermediate access point in the fixed public telephone network". The basement MDF room qualifies as an intermediate access point in the public telephone network. In other words, the connection in the basement MDF room is the point of access, not the NTP.

Access to IBWS operated by building owner or non-SMP operator

Where the in-building wiring system (IBWS) is owned and operated by a building developer or an alternative network operator (i.e., not by Gibtelecom) and hence the IBWS constitutes a bottleneck facility for access to end-users in the building (as it would not be economical for another operator to install a parallel IBWS), the NTP remains in the end-user's premises but the GRA can use its regulatory powers to impose mandatory ULL-type access obligations at a basement MDF room point of access on the IBWS provider in two ways. First, it can carry out a market analysis of the local sub-loop market, housing estate by housing estate, and impose SMP access obligations on the IBWS provider in each one. Such a review, however, would involve much time, effort and substantial cost.

The second approach is to declare any new building development with only one or two IBWS providers as automatically subject to a mandatory access regime for the benefit of all fixed public electronic communications network operators. declaration could be viewed as a complement of the previously mentioned statutory right to install in-building wiring to the end-user's premises. Legal authority for this obligation might be found in the facility sharing requirements listed in the General Conditions for general authorisations (Part A (5) of Annex II to Authorization Directive 2002/20/EC)1 or the remedial powers to impose facility-sharing under Article 12 of Framework Directive 2002/21/EC². Again, the best way to give non-discriminatory and ready access would be to handle the transfer of end-user connections, where technically feasible, through a point of access in a basement MDF-type facility in the building, such facility built to common industry standards to allow use of the same MDF interconnection equipment in all new building developments in Gibraltar. Such a solution would work for new buildings while older buildings may be problematic due to physical constraints and/or technical difficulties, high costs and inconvenience to the occupants of re-engineering a basement MDF-type facility.

¹ Annex II, Part A, Authorization Directive 2002/20/EC:

[&]quot;5. Environmental and town and country planning requirements, as well as requirements and conditions linked to the granting of access to or use of public or private land and conditions linked to co-location and facility sharing in conformity with Directive 2002/22/EC (Framework Directive) and including, where applicable, any financial or technical guarantees necessary to ensure the proper execution of infrastructure works."

Article 12 Framework Directive 2002/21/EC (Co-location and facility sharing):

[&]quot;1. Where an undertaking providing electronic communications networks has the right under national legislation to install facilities on, over or under public or private property, or may take advantage of a procedure for the expropriation or use of property, national regulatory authorities shall encourage the sharing of such facilities or property.

^{2.} In particular where undertakings are deprived of access to viable alternatives because of the need to protect the environment, public health, public security or to meet town and country planning objectives, Member States may impose the sharing of facilities or property (including physical co-location) on an undertaking operating an electronic communications network or take measures to facilitate the coordination of public works only after an appropriate period of public consultation during which all interested parties must be given an opportunity to express their views. Such sharing or coordination arrangements may include rules for apportioning the costs of facility or property sharing."

Question 2: Do you agree with the three types of interconnection as mentioned above? Are there any other forms of interconnection available?

The Consultation document defines three different levels of potential interconnection to the customer access network:

- 1. Interconnection at the telephone exchange MDF (designated Point A)
- 2. Interconnection at the distribution point on public streets the street cabin (designated Point B), and
- 3. Interconnection to IBWSs in individual buildings Building MDF (designated Point C).

To this list, Gibtelecom adds a forth option: interconnection at the distribution boxes on individual floors of a housing estate which we would designate as Point H (for horizontal access). Access to Point H is obtained through laying down cables in vertical ducts and other conduits inside the building. Identification of the distribution boxes does not mean they are standard infrastructure on each floor. Nor does the identification of the horizontal distribution box denote that (1) if they exist, it would have sufficient room for a third party to collocate equipment or that expansion is possible to accommodate a third party and (2) if they do not exist, there would be sufficient space to allow its installation nor that the cost of such installation will be low.

Question 3: Do you agree that access to in-building wiring should be available to any operator that requests access? Please give reasons for your answer.

It is Gibtelecom's position that all public fixed network operators should have access to end-users in a housing estate or other building development when there are only one or two IBWSs in the building. They do constitute bottleneck facilities. This principle should apply whether the IBWS is owned and/or operated by the SMP incumbent (Gibtelecom), an alternative public fixed network operator or the building owner. Gibtelecom wishes to add that the point of access should vary based on the age of the building in question.

• Buildings erected post-2001 (the year in which Gibraltar adopted its first telecommunications liberalization package). Access to the IBWS (regardless of who owns or operates the IBWS) should be guaranteed at the basement MDF level (Point C). This is the point of access, not the NTP which remains at the end-user's premises. When the IBWS is owned and operated by Gibtelecom, the ULL Regulation's rules on sub-loop unbundling apply under conditions set down in the Reference Unbundling Offer (RUO). When the IBWS is owned and operated by the building owner, access is, in the first instance, the subject to commercial negotiations in the knowledge that any stalemate in negotiations will be quickly referred to and taken up by the GRA. When the IBWS is owned and operated or simply operated by an alternative network operator, the terms and conditions for access at Point C should be set out in advance in a RUO-type document.

Buildings erected pre-2001. Access to the IBWS in pre-2001 buildings present special problems. First, in most pre-2001 buildings, no basement MDF communications room exists as it was not the industry norm at the time of their construction. At most in these cases, there are "boxes" in almost all instances installed, owned and operated by Gibtelecom. The cost of "reparenting" may be so costly as to be prohibitive. Therefore, access to the IBWS at Point C in the basement in pre-2001 buildings cannot be guaranteed and should be considered exceptional due to physical and technical constraints. Instead, access at Point C would be considered on a case-by-case basis. Of course, in the case of Gibtelecom, alternative operators already have ULL access rights to end-user's based on the RUO in such buildings.

Gibtelecom needs to add that the category of IBWS includes in—building digital cable television wiring systems consisting of coaxial cables. Buildings in which digital cable TV wiring systems are installed should also fall under the mandatory access requirement. The fact that such cable TV systems exist in buildings also separately wired for telecommunications traffic should not remove them from the access obligation. These cable TV systems can carry telecommunications traffic. Further, the presence of only 2 IBWSs in a building (one copper wire and the other coaxial cable) still qualifies the competitive situation (for both wiring systems) as a bottleneck, as the Consultation document points out in Section 3.2. Other network operators should have the right to choose which IBWS to access in a building with both systems. An ULL access regime should apply to the digital cable TV system provider, including the listing of terms and conditions in advance in a RUO-type document to ensure non-discriminatory and transparent access.

Question 4: Have you encountered any problems with in-building interconnection? If so, please explain what the issues are and suggest how they can be resolved.

Gibtelecom can report on the two main problem situations involving access to IBWSs owned and operated by Gibtelecom in housing estates. The Company also reports on one example of success in facilitating access to the IBWS of a building.

Ocean Village/CTS. The IBWS in Ocean Village, owned and operated by Gibtelecom, consists of copper wire supplied by Gibtelecom and whose installation was financed by Gibtelecom. In April 2008, Gibtelecom found its wire to an end-user in the building had been improperly cut by a competing operator, CTS. The internal cable wiring from the apartment of the end-user had originally been installed by a subcontractor hired by the developer who installed the wirings for Gibtelecom. These were then connected by Gibtelecom to its previously installed Distribution Point (DP) boxes located throughout the buildings. An end-user in question, upon moving into the building, ordered the CTS ISP service. CTS then took unilateral action to re-route the internal wiring from the end-user's apartment from the Gibtelecom DP box on the first floor to the CTS communications box on the third floor. It accomplished this by

chopping off the wires from the Gibtelecom DP box and attaching them to the CTS communications box. It did this without making any request, and without any notice ever being given to Gibtelecom. The customer became dissatisfied with CTS service and subsequently requested to switch to the Gibtelecom telephony and Gibconnect ISP service.

Gibtelecom only became aware that the line had been cut to its own DP box when it conducted a regular test of the line on 21 February 2008 in preparation for the installation/activation of Gibtelecom service and found the line to be dead. Clearly, improper and non-industry standard steps are being followed by CTS. Gibtelecom has made a proposal to the management company running the building to purchase the IBWS including DP boxes located throughout the premises. This would provide the possibility of the creation of a functional solution involving the establishment of a basement communication room for network operators, allowing lines to individual end-users in the building to be switched from one operator to another without disruption or any improper tampering with Gibtelecom's network.

<u>Europlaza/Sapphire Networks</u>. The IBWS in the Europlaza complex is also owned and operated by Gibtelecom. Much like for Ocean Village the copper wiring was supplied and its installation financed by the Company. Sapphire Networks recently approached Gibtelecom with a request for the establishment of a common communications room in the basement to facilitate access to the end-users in the building, and these talks are continuing. They have also expressed their interest in paying for access to Gibtelecom IBWS in other buildings, but without having to Gibtelecom's ULL offer, which is the way alternative operators can gain access to Gibtelecom's existing in-building wiring under the local and EU framework.

<u>Atlantic Suites</u>. The IBWS in this complex is owned and operated by the development's management company. Access to the IBWS is provided on a commercial basis via a common communications room in the basement. Independent of whether any IBWS is owned and/or operated by the building developer (or management company in this case) or an alternative operator, Gibtelecom considers the provision of access to a potential bottleneck facility at a common communications room with clear delineations of infrastructure and responsibility, as demonstrated in Atlantic Suites, to be an appropriate solution for new buildings.

Question 5: Do you agree that installation works for additional infrastructure should be carried out if all existing facilities for in-building interconnection are exhausted? Please give reasons for your answer.

In section 4.0 of the Consultation document, the GRA takes the following positions regarding IBWS (or block-wiring) and access to it:

 The IBWS is an essential facility and access must be guaranteed on nondiscriminatory terms and conditions to competitors.

- The block-wiring provider is to meet the access requirements of all local fixed carriers in the building within a reasonable period from the issue of the occupation permit.
- In buildings with only one copper wiring infrastructure, the NTP should be in a suitable location, such as the basement, so to provide convenient access to staff from all operators which own or lease all or parts of the IBWS. All equipment belonging to operators must be clearly identifiable with a clear delineation point between them.
- In multi-occupancy buildings each operator may have their own NTP or equivalent and end-users are to be free to request a transfer to an alternative operator.
- If one operator requests access, the block-wiring provider must provide access to all or part of its infrastructure under a commercial agreement negotiated by the parties involved.
- If all existing facilities for interconnection are exhausted, the requesting operator may negotiate in good faith with the building developer and/or the block-wiring provider for installation works for additional infrastructure. All parties involved shall endeavour to satisfy such an interconnection requirement.

Thus, the Consultation document takes the position that the block-wiring provider, who may be the building developer and/or a network operator who leases and operates the IBWS, must provide access on request in a reasonable time. What type of access must be provided when capacity is constrained and within what timeframe is not clear. On the one hand, for a new building under construction, the requirement to provide capacity within a reasonable time is measured from the date of issue of the occupation permit. For existing buildings, when IBWS interconnection facilities are exhausted, there appears to be a requirement to negotiate in good faith to find a solution and a request for all parties to cooperate in the funding. No particular time limit is set but again it must be reasonable. Of what the solution might consist is not delineated. It might include parties currently served by the building's IBWS capacity somehow sharing their facilities on a commercial basis. Or it might mean the building developer and the block provider construct new IBWS facilities (which could mean laying new wires, possibly building new conduits and/or expanding communications rooms). As we understand it, the Consultation document is setting down a good faith requirement (an obligation of effort) to find a solution without prescribing the form of the solution nor making it an obligation of result.

The specific question posed in Question 5 concerns whether Gibtelecom would concur that new infrastructure would have to be built ("should be carried out") if all existing IBWS interconnection capacity is exhausted. Logically, this must concern existing buildings as, in the case of new buildings, capacity issues should be dealt with during the planning and overall construction period. A good faith effort to meet the requests of alternative operators for capacity in an existing building implies that the cost of any new installation work will be reflected, appropriately, in the price charged. This also connotes that any proposed installation work which proves technically challenging and very costly might not come to fruition as the alternative operators concerned are not willing to bear the cost.

It is Gibtelecom's position that the block-wiring provider cannot be forced to build new capacity in existing buildings if the existing capacity is exhausted. Indeed, there may be physical and technical constraints that render such a course of action impossible. There also may be exorbitant costs that cannot be borne by the parties on a reasonable basis. It particularly depends on which part of the IBWS is "exhausted". If additional wires need to be laid in existing conduits, that may be more easily achievable at reasonable cost. If more room is needed in the existing basement communication room, that might be possible at a reasonable price without disrupting the daily life of the building's occupants. Nevertheless, if new vertical and horizontal conduits need to be constructed or an additional communications room provided either in the basement or elsewhere in the building, that will likely be very expensive and very disruptive to occupants. In such cases, if the block-wiring provider is Gibtelecom, the alternative operator can rely on the ULL offerings in the The same would be true if the IBWS provider is an alternative network operator (i.e., it would offer ULL services if access at Point C cannot be provided). This leaves the case when the IBWS provider is the building developer and for which there does not seem to be a ready answer or remedy for IBWS capacity exhaustion. Connection at a higher level is not an option as the building developer does not own a network extending beyond the grounds of the building complex.

Gibtelecom's position comports with EC competition law principles on bottleneck facilities and EC sector-specific telecommunications regulatory principles established over the past 20 years regarding the same. In competition law, the owner of a bottleneck facility found to have abused its dominant position under Article 82 EC might be forced to share his existing capacity but cannot be forced to build new capacity to satisfy the demands of a competitor. For instance, in the EC Telecommunications Access Notice³ issued in 1998 (explaining how EC competition principles should be applied in the telecommunications access markets), the European Commission set out a series of cumulative conditions for application of the essential facilities doctrine (at paragraph 91), one being that the bottleneck facility had sufficient capacity (in other words, capacity was not exhausted).

Similarly, patterned on EC competition law, the NRA's regulatory power to mandate access has also been limited, in the various telecommunications directives, to opening up the SMP operator's existing capacity, thereby precluding an NRA or competitor from forcing the SMP operator to construct new capacity. Various ONP directives over the years since telecommunications services liberalisation commenced in earnest in 1990 have always allowed an SMP to reject an interconnection or access request on the objective basis that it lacked sufficient capacity. The current Access Directive 2002/19/EC illustrates this point. The provision addressing the possibility to impose the access remedy on an SMP operator, Article 12, conditions it on the availability of sufficient capacity (Article 12(2)(b)):

"2. When national regulatory authorities are considering whether to impose the obligations referred in paragraph 1, and in particular when assessing whether

³ Notice on the application of the competition rules to access agreements in the telecommunications sector, Notice 98/C265/02, published O.J. C265/02 (22/08/1998).

such obligations would be proportionate to the objectives set out in Article 8 of Directive 2002/21/EC (Framework Directive), they shall take account in particular of the following factors: ... (b) the feasibility of providing the access proposed, in relation to the capacity available;" (emphasis added)

Question 6: What are your views of the two types of agreements mentioned above?

The Consultation document defines two types of interconnection agreements for access to IBWSs:

- Agreement 1 Agreements in which the block-wiring provider is the building developer, and
- 2. Agreement 2 Agreements in which the block-wiring provider is owned or leased and operated by a network operator under the terms of a RUO and access is provided at Point C.

The running presumption of this scheme is that, on the one hand (Agreement 2), an IBWS operated by a network operator who must make offers based on a RUO is subject to a fairly strong mandatory access regime. On the other hand (Agreement 1), when the block-wiring is controlled solely by a building owner, there is only an obligation to negotiate. The building owner is not forced to advertise his terms in advance in a RUO-type framework but is subject to a threat of GRA intervention if the parties hit a stalemate in negotiations.

It is not entirely clear if the membership category of block-wiring providers in the Agreement 2 scenario is restricted to Gibtelecom, currently the only operator obligated under the ULL Regulation, or also includes any network operator who controls and operates the block-wiring in a building (and for that reason is deemed to be subject to the ULL Regulation and its RUO requirements). Gibtelecom takes the view that the membership category for Agreement 2 should encompass both.

Therefore, when the block-wiring provider is a network operator, it should be subject to mandatory access obligations whether it is the incumbent operator with SMP in the national fixed local access market or an alternative operator. The terms of access should be set in advance in a RUO, as Gibtelecom has done. As Gibtelecom has already explained in its answer to Question 1, the regular ULL Regulatory regime applies to access granted at Point C as this is access to the sub-loop - at a point of access – terminating at the NTP in the end-user's premises. The NTP is not located at Point C. When Gibtelecom is the block-wiring provider, the terms and conditions of its RUO apply and give access to alternative providers of authorised telecommunications services. Thus, Gibtelecom insists that other parties seeking access to the sub-loop at Point C must pay all charges in the RUO, including the upfront charge. To review, in the RUO, there are three types of charges:

- (1) <u>Upfront charge</u>: This is a one-time charge to recover the costs associated with preparing the RUO documentation and processes (include all legal or consulting support costs, which would not have been incurred by Gibtelecom if there were no obligation to offer RUO services). In line with the 2005 regulatory recommendation, part of these costs (the Gibtelecom personnel costs associated with the RUO preparation) have been annualised and added to the recurring monthly charges (thus lowering the one-off upfront charge).
- (2) <u>One-time charges</u>: These charges refer to specific (one-time) set-up costs incurred with the installation and activation of RUO services, including the costs of technical or administrative activities.
- (3) <u>Recurring monthly charges</u>: These charges refer to the cost of the access network itself. Due to the high investment and long depreciation periods of access network installations, costs are annualised and recovered by regular monthly (or annual) service charges, rather than charging an extremely high one-off fee.

When an alternative network operator is the IBWS provider, it too must present a RUO that sets transparent terms and conditions in advance.

Question 7: If you have any other issues or additional comments which you would like to raise, please do so under this section.

The Consultation document addresses customer access network issues presented by copper in-building wiring. In summary, it is the Company's position that the NTP in multi-dwelling building developments should be at the end-user's premises, as set out in legislation. Furthermore, the NTP and a point of access are entirely different things, with the latter being a point at which a network operator could connect to the in-building wiring system of an apartment block. Gibtelecom can already provide alternative operators with access to the Company's existing in-building wiring, and therefore end-users, through the GRA approved Reference Unbundling Offer.

The Company does acknowledge, however, that a possible way to provide access to in-building wiring would be through a point of access in a basement MDF-type facility in all new building developments in Gibraltar. This solution would not work effectively for older buildings as a result of the many physical constraints, technical difficulties and high-costs involved of adapting the existing infrastructure to accommodate access requests by alternative operators. Again, the Company must reiterate that in cases such as these, access can already be provided through Gibtelecom's Reference Unbundling Offer.