

**Advice of BIPT
concerning Belgacom's Reference ULL Offer, approved by the Minister of
Telecommunications on 28.2.2001.**

**Supplement
concerning co-mingling - placing of racks by the OLO in the same room(s) as
the Belgacom racks, approved by the Minister of Telecommunications on
27.07.2001.**

1. Introduction

1.1 The following text should be regarded as a supplement to the BIPT Advice on Belgacom's Reference ULL Offer, approved by the Minister of Telecommunications on 28.2.2001.

It forms an integral part of this Advice.

It clarifies certain aspects of the Advice in the light of the developments on the market.

1.2. Article 3.1. of Regulation (EC) No 2887/2000 of the European Parliament and of the Council of 18 December 2000 on unbundled access to the local loop stipulates in Article 3.1 that Belgacom has the obligation to keep its reference offer updated.

Article 4.2.a) of the Regulation authorises BIPT to impose changes on the reference offer, where such changes are justified.

Article 4.3 of the Regulation authorises BIPT to intervene, where justified, on its own initiative in order to ensure non-discrimination, fair competition, economic efficiency and maximum benefit for users.

2. The lack of the possibility of virtual collocation in BRUO

2.1. Point B.2 of the Annex to the Regulation, "Minimum list of items to be included in a reference offer for unbundled access to the local loop to be published by notified operators", reads :

"2. Collocation options at the sites indicated under point B.1 (including physical collocation and, as appropriate, distant collocation and virtual collocation)."

2.2. Virtual collocation is a form of collocation where the OLO places his equipment next to Belgacom's and consequently not in a separate collocation room¹, and where Belgacom at a charge ensures the management of the OLO's equipment.

2.3. There can be no mistaking that Belgacom has to provide an offer concerning virtual collocation.

In this regard Chapter 9 of the advice (the text of the advice is only available in Dutch and French) stipulates on page 45 :

"Point B.2 of the Annex stipulates that all collocation options have to be stated "including physical collocation and, as appropriate, distant

¹In principle virtual collocation is also possible in a separate room, but this form of virtual collocation seems rather theoretical to us because a separate room offers no added value.

collocation and virtual collocation". The words "as appropriate" must be interpreted as follows :

1. Belgacom must offer physical collocation as much as possible;
2. Distant collocation as well as virtual collocation must both be offered when physical collocation (a) is impossible or (b) is impossible to realise within a time limit and/or at a price deemed reasonable by the Operator.

Since it is not up to Belgacom to decide which collocation form should be deemed reasonable by the Operator, these two possibilities must be added to the reference offer as free options."

2.4. At present BRUO does not include an offer concerning virtual collocation.

As the OLO equipment is managed by Belgacom, virtual collocation can only be governed by an accurate and adequate SLA in which clear criteria and sanctions regarding this management are stipulated. Indeed, the OLO should be able to guarantee a certain quality of service to its clients. At present such a SLA is completely lacking.

2.5. It should be noted that virtual collocation can be a straining option for Belgacom because Belgacom has to hold skilled staff at its disposal for managing the OLO's equipment.

3. Physical collocation instead of virtual collocation

3.1. The problems posed by virtual collocation, namely the lack of a relevant SLA and the straining character with regard to Belgacom, can be solved by allowing the OLOs to install their equipment next to Belgacom's and to manage this equipment themselves. As a matter of fact, in that case there is no need for a SLA on managing the equipment in the framework of virtual collocation, and Belgacom is exempt from managing the equipment concerned.

When the OLOs place their racks next to or near Belgacom's and they manage their equipment themselves, this can no longer be called virtual collocation (where the equipment, by definition, is managed by Belgacom) but this is de facto a form of physical collocation outside the appropriate collocation room and in the room where Belgacom equipment is located² or in a room near to it. The standard expression for this form of physical collocation is co-mingling³. In principle, this form of physical collocation is immediately available and only some facilities should be provided for (for example : electrical supply, connection of tie cable(s), cooling, connection of outer cable/fibre OLO etc...) No matter whether these facilities are present or have to be extended (e.g. because the capacity present is insufficient) Belgacom can only ask for a compensation for these facilities in proportion to the capacity actually used, and in so far as this compensation concerns the essential costs (see point 3.4 of this document).

²It should be noted that the standard expressions such as "physical collocation light" and, especially, "pseudo-virtual collocation" rather have a confusing effect and are therefore better avoided. The standard expression in England "co-mingling" seems clearer to us and is therefore preferable.

³Oftel uses the following definition of co-mingling : "Co-mingling is a form of physical co-location where an operator's equipment is fitted and operated in the same area within a BT MDF site, as BT houses its own equipment."
(bron : http://www.oftel.gov.uk/publications/local_loop/comi0601.htm).

3.2 There is no binding provision, - either in legal texts, or in the BIPT Advice of 28.2.2001 concerning BRUO -, prescribing that physical collocation has to take place in a collocation room⁴ created especially for that purpose by Belgacom (or a third party).

On the contrary : Belgacom has the obligation to make collocation and unbundling possible, as efficiently as possible (both regarding the quick delivery time and the cost)⁵. In this regard one should not forget that, in spite of Belgacom's efforts, collocation is a very slow process. This slow delivery process justifies an appeal to the faster form of physical collocation, which is offered by placing racks next to or near Belgacom's.

3.3. By placing the OLO racks next to or near Belgacom's, costs of a separate collocation room are avoided. Also the saving in costs is in favour of co-mingling.

3.4. An examination of about fifty quotations for physical collocation revealed that Belgacom nearly always provides collocation room meant to hold 30 racks or more. It goes without saying that such excessively big rooms substantially push up the costs for collocating OLO(s) without the latter benefiting from it.

Such practices are unacceptable. In case of collocation, it is under no circumstances justified to charge costs that are not essential, for the simple reason that, as an efficient operator, Belgacom does not incur such expenses for itself either. Moreover, it is very likely that charging non-essential costs slows down the collocation and unbundling process in an unacceptable way and even makes it impossible in a number of cases.

Therefore, the basic principle should be that in case of collocation no costs should be charged that are not essential costs, in other words costs having no surplus value for the OLOs concerned or which are not essential to Belgacom for the security of its equipment or for maintaining the same efficiency level as before the collocation.

Therefore, essential costs are costs that Belgacom as efficient operator should incur for itself in order to obtain the same for its own needs⁶. Obviously the OLOs are entitled to know these costs in detail and they have the possibility to verify the costs.

3.5. Finally, it should be noted that Belgacom's sticking to separate collocation rooms for the OLO equipment may get a discriminating character in the sense that Belgacom does not need to wait for the delivery of a separate collocation room for installing its own equipment so that (for example) Belgacom can install its DSLAMs much quicker than the OLOs can. In that way the latter are totally unable to keep pace with Belgacom as regards the development of their networks. This way, Belgacom has a competitive advantage over its competitors who want to develop their network just as quickly.

Installing the OLO equipment in separate collocation rooms, if they so prefer, does not necessarily have an illegal discriminating effect in that the construction and use of it would undermine the competitiveness of the

⁴ In Ireland co-mingling is the only form of physical collocation that is offered by the incumbent, eircom.

⁵ Naturally, the security of Belgacom's equipment and buildings must not suffer, and Belgacom has to see to it that the solution offered is not liable to be pushed aside in the short term (the latter in comparison with what Belgacom applies for itself).

⁶ Examples of non-essential costs are outer doors or outer stairs merely (and unasked) for the benefit of the OLO, useless inner walls and doors, useless demolition and renovation due to this demolition, cable trays and cables that are longer than should have been necessary if an optimal collocation room were chosen ...

OLOs concerned. Such an illegal effect could occur however if, for example, the delivery of the separate collocation room were late, the price of the separate collocation could not be compared with that of other collocation rooms or collocation options due to insufficient specification, etc..

4. Security aspects and access conditions

4.1. Point B.5 of the Annex to the Regulation explicitly provides for determining access conditions for staff of competitive operators. In the Advice (Chapter 9, point 6.1, B.5) some explicit indications are given on how access to the collocation room should be organised.

When a system of badges or individualised keys is used, a separate collocation room is needed if the OLOs wish to have access to their racks unaccompanied.

When an escort system is applied, the separate collocation room does not offer any surplus value to the OLOs as regards access possibilities.

It is up to the OLO to determine the form of access wanted⁷.

4.2. If the OLO wishes unaccompanied access, Belgacom has to provide a separate collocation room, in accordance with the rules already described in the Advice, provided that Belgacom only charges the essential costs for this collocation room and presents them in detail to the OLO which must have the possibility to verify the costs charged.

4.3. If the OLO asks for an escorted access, Belgacom does not have to provide a separate collocation room⁸. This means that, in principle, Belgacom has to allow co-mingling in that case. This can be done in two ways :

1. the OLO asks Belgacom for a quotation and Belgacom draws this up possibly including alternatives regarding collocation; Belgacom provides the OLO with the quotation within 10 workdays;
2. the OLO assumes that co-mingling is in fact the most obvious method, and places a firm order in that sense, without waiting for a quotation first⁹. Belgacom provides the OLO, the market and BIPT within 10 workdays, the quotation regarding co-mingling and the estimated delivery date.

Whichever way the OLO chooses, he can always ascertain oneself of the possibilities of the site concerned¹⁰ by means of a site survey.

4.4. If Belgacom turns down co-mingling for justified reasons (see point 5.2 of this document) Belgacom has to make available to the OLO a separate room at a cost (which obviously only contains the essential costs) in proportion to the number of m² occupied by the racks of the OLO, multiplied

⁷ Irrespective of his choice, Belgacom obviously only charges the essential costs.

⁸ Unless this were explicitly wished for by the OLO.

⁹ In this case the OLO should be aware that he gains time, but that he risks to be faced with a price he had not expected, for example in the case of a necessary extension of the collocation room. Therefore, placing a firm order directly is only possible if the OLO accepts the price charged by Belgacom in the quotation (in so far as this price is reasonable and limited to the essential costs).

¹⁰ For such a site survey a firm order is not required.

by 2 in order to include the passageway in the cost¹¹. The monthly contributions to the "common space" should also be determined in proportion to the surface occupied by the OLO. Obviously, in these cases too the OLO is entitled to a specification and verification of the costs.

4.5. As regards the security of the different racks an efficient solution is to make sure that:

- (a) the racks installed by the OLO are locked up and
- (b) that an escort is provided for each time the OLO visits its racks. This escort can consist of Belgacom staff and/or staff from a security firm.

4.6. The security costs are at the expense of the OLO, as far as these are reasonable. They must be included in BRUO, after approval by BIPT. To that end, they are submitted to BIPT, within 6 workdays after the publication of this supplement.

Belgacom also draws up a relevant SLA in order to have clear criteria and sanctions. This SLA is approved by BIPT and included in BRUO. To that end, an draft SLA is submitted to BIPT, within 6 workdays after the publication of this supplement.

4.7. As for the escort, the OLO can choose among the following possibilities:

1. it accepts the SLA and the security firm (whether or not with Belgacom staff) proposed by Belgacom. In such case, the OLO can negotiate a specific SLA with this security firm. This SLA must be at least as strict as the SLA applying to Belgacom¹².
2. The OLO is of course entitled to prove the prices' and the SLAs' market conformity. In such case, the OLO can make an alternative proposal to Belgacom (with copy to BIPT) in order to agree on better conditions as regards price as well as SLA¹³ with the security firm proposed by Belgacom or with another security firm, proposed by the OLO.

5. In which cases can co-mingling be applied ?

5.1. Although the term "co-mingling" is relatively new, the practice of co-mingling is not unusual and is permanently used by Belgacom for its own purposes.

According to Article 3.2 of the Regulation Belgacom has to meet all reasonable requests by OLOs for accompanying facilities (such as collocation). This answer should be given in a transparent, fair and non-discriminating way.

5.2. The simple fact that Belgacom applies co-mingling for itself, implies that an OLO's request for applying co-mingling is not an unreasonable request.

¹¹ As stipulated in the Advice this room has to be delivered, in principle, within a period of two months.

¹² Indeed, the most obvious solution seems to be that the OLOs also make use of the Belgacom security firm, with an appropriate SLA or not

¹³ Provided that the SLA proposed by the OLO must not be less strict than Belgacom's.

It should be noted here that Belgacom can refuse co-mingling in the following cases :

- (a) co-mingling is impossible for technical reasons;
- (b) co-mingling affects the integrity of Belgacom's network.

5.3. As regards the refusal of co-mingling, Belgacom must include a sound procedure in BRUO which at least provides for the following :

1. within a period of 5 working days Belgacom furnishes proof to BIPT of the impossibility of co-mingling in a certain site due to one of the reasons mentioned above;
2. after approval of BIPT Belgacom immediately informs the market of the impossibility of co-mingling in the site concerned, including the reasons as far as they are not confidential.

6. What should happen with the current procedures ?

6.1. The following schedule should be followed for the current procedures for ordering and delivering separate collocation rooms:

- (a) with regard to new orders OLOs can henceforth opt for co-mingling in accordance with point 4 of this document;

- (b) if the collocations are already ordered by means of a firm order, several scenarios are possible :

- * a firm order is placed but it is not yet carried out by Belgacom: in principle, Belgacom should be able to provide co-mingling immediately;

- ** in the context of the firm order concerned Belgacom has already concluded agreements with a contractor but the work has not started yet: the OLO can modify this firm order and opt for co-mingling; in that case the OLO pays a compensation to Belgacom in order to cover the administrative costs incurred. These administrative costs solely concern what has been done specifically for the firm order concerned. They are not payable by the OLO if they were not submitted to the OLO and BIPT in a detailed and well-reasoned way;

- *** the work has already started :

- the OLO can have the work put to a stop and opt for co-mingling but in that case is obliged to pay the costs incurred, as far as these are essential, and were presented to the OLO and BIPT in a detailed and well-reasoned way;

- the OLO can also opt to let the work already started continue, and to pay for it in accordance with the agreement already signed, but in anticipation of the completion to put its racks next to Belgacom's so as not to slow down the development of its network by constructing a separate collocation room¹⁴.

- In both cases the costs¹⁵ (which obviously only include the essential costs) are to be paid by the OLO. These costs must be deducted from

¹⁴ In the matter of moving the rack to another collocation room : see point 9.4. of this document.

¹⁵ These are of course the costs of co-mingling (if chosen by the OLO) or the costs of putting the OLO racks next to Belgacom's, if the OLO prefers to have the work already started continue.

the costs incurred, or from the costs to be paid (or already paid) for the separate collocation room, if :

- (1) the two-month period for the delivery of the separate collocation room already ordered has passed or
- (2) the quotation for the separate collocation room can (or could) not be compared with other possibilities because of insufficient specification, or can (or could) not be subjected to the right to verify its justness by the OLO concerned.

**** the work is fully completed and the delivery was accepted by the OLO.

In that case the arrangement referred to in point 4.2 of this document applies.

6.2. For each firm order in which the OLO explicitly opts for escorted access and in which the OLO explicitly opts for stopping the work and for co-mingling, Belgacom must, in such a case, immediately stop the work to the site concerned for this OLO¹⁶, and implement co-mingling in accordance with point 4 of this document as from the date of receipt of the OLO's notice.

If the OLO does not explicitly opt for stopping the work, the work is simply continued.

Anyway, within a period of 10 working days, Belgacom must inform the OLO (a copy is sent to BIPT) about the response already given to the firm order concerned.

The costs to be billed by Belgacom must be announced as soon as possible; a 20 % margin is allowed for the estimate. The costs are detailed and can be verified by the OLO.

6.3. If an OLO alters its firm order already placed by opting for an escorted access, the other market players, as well as BIPT are notified of this by Belgacom.

6.4. The OLO can persuade itself of the work done by means of a site survey.

6.5. In order to avoid any discrimination between an OLO (or several OLOs) who, following the publication of this supplement to the Advice, can immediately claim co-mingling, and an OLO (or several OLOs) who already placed firm orders in the past, as a result of which the work was started and the costs incurred have to be defrayed by the OLO (or several OLOs) concerned, the following transitional measures are taken :

- (a) there is no monthly contribution for the "common space" (except in proportion to the number of m² actually occupied, multiplied by 2) for the OLO's concerned who already placed firm orders, provided that within a period of five working days following the publication of this supplement the OLO(s) concerned notifies/notify Belgacom of its/their decision to switch to co-mingling for that site, in accordance with point 4 of this document;

¹⁶ This means that when work is done to a site following firm orders from several OLOs, and one of these OLOs does not opt for an escorted access, the work can evidently be continued without interruption.

(b) each OLO which afterwards collocates¹⁷ in the site concerned must compensate the OLOs already present in that site which use that collocation in the context of a BRUO agreement, for the costs incurred (from which are deducted the costs for co-mingling for the OLOs present in that site and involved in the calculation of the costs thereof) under the following conditions :

* the costs incurred are essential costs;

** the costs incurred were submitted in a detailed and well-reasoned way by Belgacom to the OLOs already present in that site and which were involved when the costs thereof were calculated, as well as to BIPT;

*** the OLO(s) concerned already present in that site and which were involved when the costs thereof were calculated have within a period of five working days following the publication of this supplement notified Belgacom of their decision to switch to co-mingling for that site, in accordance with point 4 of this document;

**** the OLO which collocates afterwards does so in the context of a BRUO agreement concluded with Belgacom¹⁸.

As a result these costs incurred (from which are deducted the costs for co-mingling for the OLOs present in that site and involved in the calculation of the costs thereof) are paid proportionally by all OLOs in this site using that collocation in the context of a BRUO agreement.

If Belgacom wishes to use the separate collocation room concerned for its own purposes¹⁹, this is possible provided that the proportion of the costs is paid; so, in this case Belgacom is regarded as a newcomer.

Belgacom must announce in a transparent way the information regarding the costs incurred (from which are deducted the costs for co-mingling for the OLOs already present in that site and involved in the calculation of the costs thereof) as well as the names of the OLOs concerned.

7. Where is the most efficient place to install the racks ?

7.1. Both the Belgacom Document "OLO racks in Belgacom transmission room" ("Version 2.0 dated June 5th 2001") and Belgacom's oral clarification of it show (for instance) that Belgacom's DSLAMs can be located in the so-called "transmission room", in another separate room etc. Anyhow, the place where the Belgacom DSLAMs (for instance) are situated - wherever that is - are an appropriate place to install the DSLAMs (for instance) of the OLO since the MDF cables arrive in the same room.

7.2. The places for the racks are allocated to the different OLOs according to the "first come, first served" principle.

¹⁷ No matter whether it concerns co-mingling or physical collocation in that specific separate collocation room.

¹⁸ This means that if an OLO collocates afterwards in that site and does so in the context of an agreement other than BRUO (BRIO, bitstream, ...), he does not have to pay a compensation as stipulated above.

Of course, this compensation will have to be paid, as soon as this collocation is used in the context of a BRUO agreement.

¹⁹ Regardless of the purpose of that use.

It is up to Belgacom to make optimal use of the space available. The OLO's concerned can verify this by means of a site survey.

8. What to do in case of lack of space ?

8.1. If there is not enough space in the room where the Belgacom DSLAMs are located, the OLO's rack(s) should preferably be installed as close as possible to the Belgacom DSLAMs. In such cases Belgacom is allowed to make a separate room available under the same conditions as when Belgacom turns down co-mingling for acceptable reasons (see point 4.4 of this document).

8.2. Anyway, the OLO can verify alleged lack of space on the spot.

8.3. If Belgacom itself is faced with lack of space and therefore cannot install its own equipment because of the presence of OLO equipment, Belgacom must get access to the collocation rooms of the OLOs in order to install its equipment. In that case Belgacom contributes to the part of the common costs and the monthly contribution to the common space, just as each OLO concerned.

9. Co-mingling as a transitional measure ?

9.1. Here the question no longer arises whether this collocation form is temporary or not. Since this is a form of physical collocation, the rules for physical collocation apply.

It is conceivable, however, that it is stipulated in a contract that when Belgacom publishes a SLA concerning virtual collocation and this SLA is approved by BIPT, the OLO can opt for a "transition" from the racks concerned to a form of virtual collocation where the racks are henceforth managed by Belgacom.

9.2. Since physical collocation in an existing space is concerned, the delivery should in principle take place immediately, as stated in the Advice (see also point 3.1, second paragraph of this document in that regard).

9.3. The aim of co-mingling is the OLO obtaining a fast and efficient collocation. For that reason, Belgacom should refrain from imposing conditions incompatible with this aim : the construction of separate cable trays for the benefit of the OLO is therefore unacceptable: the OLOs' cables and tie cables must be placed in the cable trays used by Belgacom. Separate cable trays are only acceptable when the existing cable trays are inadequate for the cables of the OLO and when this has been verified and stated by the latter. The same goes for the 48 V / 230 V power supply, the air conditioning and other facilities. If extensions or new installations of facilities appear to be necessary, the costs (which evidently only include the essential costs) must be shared by all (current and future) users thereof, Belgacom included (if, of course, Belgacom makes use of them), in proportion to the effective use made. It goes without saying that in these cases too, the OLO is entitled to a specification and verification of the costs.

That is why the placing of OLO racks next to Belgacom racks must not slow down the delivery of the collocation rooms.

Belgacom must ensure that enough staff is made available or recruited to satisfy the requests for collocation.

In every way, co-mingling requires much less work than the construction of separate collocation rooms.

9.4. If an OLO has placed equipment in both the separate collocation room and next to the Belgacom racks (or in the neighbourhood) and wishes to place the latter equipment in the separate collocation room, Belgacom cannot refuse save for reasons of lack of space in the collocation room. The move is at the expense of the OLO, as well as the contribution to the part of the "common cost" and the monthly contribution to the "common space".

If, on the contrary, Belgacom obliges the OLO to move its rack to the separate collocation room, the moving costs are at the expense of Belgacom, as well as the contribution to the part of the "common cost" and the monthly contribution to the "common space".

10. Conclusion

This supplement should be regarded as a clarification of certain aspects of the Advice, as indicated in point 1 of this document. This means that these clarifications may have an evolving character. Both Belgacom and the OLOs should take this into account. Situations not provided for should always be submitted to BIPT.