NON-CONFIDENTIAL RESPONSE OF *[RESPONDENT X]*

Consultation regarding the analysis of the broadband and television broadcasting markets

Reference: CONSULT-2017-B8

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INTRODUCTION

[confidential]

The topics are:

- SMP
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1. SMP

Proximus and Telenet are SMPs

Cable and fiber/copper are two separate markets

It is clear that we face a duopoly between Proximus and cable operators in their respective footprints in fixed-broadband markets.

Non-competitive (Cournot type of) oligopolies can take the form of joint dominance with tacit coordination or unilateral market power both resulting in inefficient competition. The situation with no explicit or no tacit collusion are known as tight oligopolies.

The market dynamics on broadband and broadcast (as well as fixed telephone lines) are very limited. Besides Proximus and Telenet in Flanders and Brussels, Proximus and VOO in Wallonia and Brussels there are barely any other viable operators. Proximus and Telenet are the only fixed network operators in Flanders. This situation will most likely not improve taken into account the different barriers to enter the analysed markets.

To our opinion, the Regulator has clearly identified impact on the consumers caused by the SMP: higher prices, lower innovation and lack of/reduced consumer welfare. *[confidential]*.

The similar market offerings of the operators – with more and more bundling of services and with similar consumer proposals (see for example, Wiggo vs Tuttimus) – and their consequential price increases – reason why they have been described in the press as 'the champions of synchronized swimming' regarding price increases – clearly demonstrates the impact of an SMP.

This has even been reinforced by, amongst other, converging market shares and consolidation (Proximus-Scarlet, Telenet-Base-SFR), deployment of NGN, highly developed distribution and sales network, control of infrastructure that is not easily duplicated (which is also relevant for access to the last mile).[1]

This creates an equilibrium between operators, with no interest from deviating from this equilibrium.

This situation seems to develop in infrastructure based markets where competition becomes more limited and based only on quality aspects (coverage, speed, etc.) and less on price.

We understand that the proof for collective dominance has a higher standard compared to the proof for individual SMP. For an individual SMP, it is enough to adopt a forward looking perspective together with the structure of the market and some economic assessment.

Moreover, since 'joint dominance' is more difficult to prove, and has the risk of deregulation leading to irreversible damage, the non-substitutability between cable and fiber/copper is a fully justified alternative to the Regulator.

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[1] *[confidential]*

The negative consequences of 'individual SMP' on e.g. public welfare are the same as joint dominance however. The non-substitutability between cable and fiber/copper obliges the Regulator to look to the Belgian market with an 'individual SMP' perspective.

We fully support the analysis of the Regulator and the non-substitutability conclusion. The non-substitutability is likewise an important reason why an alternative operator should have access to all broadband and broadcast technologies.

As to the non-substitutability we also note that another difference between cable and copper is the technical impossibility to propose wholesale local access. In such event substitutability would remain a theoretical concept, as no remedy is enforceable.

[Respondent X] has one concern, being that regulation might be lifted when a 3rd NGA is present in a certain area *cq.* territory. If the area is small, then we might end up with a myriad of small spots with no regulation surrounded by areas with regulation. Operators using the regulated access in this area would face further problems so, at the least, if regulation would indeed be lifted, a transition period of multiple years should be foreseen.

Key take-aways

Why we believe Proximus and Telenet are SMPs:

- Price increases take place at the same time for all actors
- Consolidation in the market (Proximus-Scarlet, Telenet-Base,SFR) stifles the market
- Low market dynamics due to the absence of a 3rd infrastructure player
- Their similar bundled offerings to consumer
- The high sunk cost of NGA deployment and uncertainty of future demand limit the number of candidate entrants

Why cable and fiber/copper are two separate markets:

- We fully support the arguments of the Regulator's analysis of non-substitutability
- It is difficult to prove (a risk of) joint dominance. Since the negative consequences on public welfare (less choice, lack of innovation, high pricing) of "individual SMP" are the same as joint dominance, taking an 'individual SMP' perspective is fully justified for this reason
- New entrants in the broadband market can only choose cable because fiber is not enough deployed and copper is not future proof
- It is technically impossible to propose wholesale local access

Our recommendation to the Regulator:

- Foresee a long transition period in case a 3rd NGA would arise and if this would lead to deregulation

2. BUNDLING

Access to fixed broadband is essential

As demonstrated in the market analysis of the Regulator, network operators evolved to a majority of bundled offers in Belgium, whereby the fixed component – with few churn – leads to less competition by mobile players that are not able to offer a fixed component like broadband only.

We believe that this evolution will be reinforced since Telenet also operates its own mobile network, leading to the most recent product of Telenet, WIGO, and equally leading to a similar multiplay offer like Tuttimus by Proximus.

Once a consumer has chosen for a multiple-play offer with a fixed component, it is extremely hard to make such consumer switch to another offering:

[confidential]

Moreover, where it is very difficult for another multiplay operator to convince a consumer to switch to another fixed network, this is definitely the case for a stand-alone player who is not able to offer such fixed service in a bundled offer. The larger the share of multiple play packages, the smaller the individual potential market of the underlying products and services become, and the harder it is to keep or acquire a competitive position.

[confidential]

Indeed, operators that can apply a convergent strategy because they own a fixed network, enjoy far less churn, lower costs per user and more cross – and up-selling capabilities which allows them to protect and even improve their market position to the detriment of for example mobile only players. The advantages of such bundled offerings, including higher ARPU's, are on a yearly basis highlighted in the annual reports of such respective operators. *[confidential]* internet standalone can only be offered by a fixed operator who sells this stand alone service at a higher price than in its bundled offers.

[confidential]

Orange on the other hand succeeded in creating a bundled offer with fixed services but had to wait for regulation. It should be noted however, that this bundling strategy is merely a retaining strategy for its mobile customers since the conditions under which they can have access to the fixed services makes it extremely hard to compete.

Obligation to provide passive access everywhere

We support passive access wherever fiber is deployed. We believe that it should be *ex ante* passive access everywhere, and we are not in favor of passive access to fiber on the condition that at least one operator has shown its interest beforehand.

It is also in the operator's interest to provide passive access wherever it deploys fiber. One knows that the deployment of a fiber network becomes profitable from a certain take-up threshold (minimum of subscriptions) due the sunk costs of *home-passed*: by giving incentives to alternative operators, the latter ones will convince their customers too to activate the fiber, so *home-passed* (sunk cost) becomes *home-*

connected (recurring revenue) for the operator. The earn-back period for their investment will become shorter.

In addition, there is an opportunity for both the incumbent (*cq.* fixed network operator) and the alternative operator to have a common marketing objective. Fiber can be a new technology that will seduce the end user by its innovative and efficient character, regardless of the operator providing it. *[confidential]*. Analysts also favor such model: it's better that the operator deploying a fiber network recoups its investments as soon as possible via wholesale supply to alternative operators.

Not imposing passive access obligations everywhere but only if an operator made a request or has shown its interest will be too complex to implement or even to follow up. The operator could, for example, impose an unrealistic planning to allow alternative operators to demonstrate their interest in due time. Likewise, the incumbent might be forced to create an inefficient hybrid architecture. An alternative operator may not be interested at a certain moment by a passive access in a certain area, but it can become interested later. However, then it will be too late.

Similarly, a new entrant who wants to enter the market in the future would be faced with areas excluded for competition based on passive access and it will not be able to differentiate its offer.

Most Favored Nation – non-discrimination

[confidential] the most favored nation *cq.* non-discrimination approach should be applied at the wholesale broadband and broadcast market. This would ensure that with the advancements in technology, the wholesale market would remain relevant. We believe it is the role of the Regulator to make such clauses mandatory. This would imply, inter alia, that at the wholesale level, all parties could have access to the newest technologies available in the market.

The Regulator should also follow-up on regular basis that the SMP network operators are compliant with MFN and that the access to new technologies are given at the same time as the operator's retail division and on non-discriminatory conditions.

Possible forms of access to the fiber

Regarding the possible forms of passive access to fiber, we recommend unbundling at flexibility points and for fiber zones that are already deployed, unbundled access to wavelengths. This model presents a moderate cost increase for the Proximus architecture and agree with the observation of the Regulator that this should not exceed 10% of the total cost at first glance). This model is not likely to increase the price of fiber access.

Flexibility points only makes sense if they have a sufficient size (a minimum number of connections). This will limit the number of flexibility points and therefore it will limit the supplementary cost for Proximus to foresee flexibility points during its deployment. In addition, it anticipates the break-even over time for the alternative operator (the latter will be more inclined to use flexibility points if there are many potential customers connected to it).

The co-investment models

The deployment of fiber over 15 years raises the question of its homogeneity. *[confidential]* for the duration of this market analysis, there will not be sufficient *home-passed* for fiber to be of interest *[confidential]*. Imposing or encouraging a co-investment formula can speed up the deployment of fiber. In exchange for co-investment, the alternative operator who proposes such, should be able to choose or at least influence the deployment areas.

The impact *cq.* incentive of a possible governmental deployment plan might also be interesting to consider in the future.

Access for NGA (fiber/cable)

We support all forms of access for NGA (fiber/cable) for the following fundamental reasons:

- It allows better service competition based on a more efficient technology without having to duplicate this technology (in the case of fiber) or because it is not duplicable (cable)
- Without an access obligation, fiber networks may lead to a new monopoly on both the infrastructure and the services they host (since the infrastructure is more efficient, some services could only function on fiber and so will not be available on other infrastructures: this creates a new monopoly on services). Since fiber is more efficient, this new form of monopoly (some services only available on fiber) risks removing service-competition from other platforms.

Timing of the regulations

[Respondent X] would be very grateful if the Regulator could - if possible - share their insights regarding the timing of the potential new regulations. *[confidential]*.

Key take-aways

The perspective of *[Respondent X]*:

- *[confidential]*
- *[confidential]*
- Common marketing will improve the adoption of new (innovative) technologies in the market
- *[confidential]*
- The current conditions (e.g. pricing) are not apt to create effective competition
- Imposing passive access obligation for fiber only when operators have shown interest, is not beneficial. The area can become more interesting later on (e.g. demographics, other entrants). This would even prevent the ladder of investment objective (e.g. gradually ramp-up its geographical customer reach for broadband)

Our recommendations to the Regulator:

- Make all passive and active access solutions for both fiber & cable available for the sector *[confidential]*
- Provide passive access to fiber through unbundling at flexibility points and (if fiber is already deployed) unbundled access to wavelengths
- Define the minimum number of connections for a flexibility point
- Assess the impact of utility companies on the deployment of fiber
- Consider alternative business models for fiber deployment

- Study how access obligations should be implemented in case of alternative business models (e.g.: sales & lease back, private IoT networks)
- If possible, share the insights of the Regulator on the timing of the new regulations *[confidential]*.

3. COST & PRICING

Context

The concept of fair prices will still be based on a Long-Run Incremental Costs (LRIC) bottom-up model for:

- Local access to the fiber network (for the *wholesale local access*),
- *Wholesale central access* for both Proximus (fiber) and for cable operator
- *Wholesale broadcasting market*

We read that it will not be available on the short term. Therefore, 3 options are proposed:

1. An extension of the tariffs of the Decision of 19-2-2016 (except for fiber where it does not apply)
2. A correction of these tariffs on the basis of a benchmark
3. A validation of prices which would be concluded on a commercial basis (they will be considered as "fair prices")

In this approach, we regret a certain lack of ambition on:

- The use of the traditional LRIC bottom up even for Next Generation Networks (NGN)
- The unknown timing for the development of the new pricing model, so that the Regulator must propose 3 temporary options whose validity duration is unknown
- The damaging consequences of these 3 options
- The vagueness of the concept of fair pricing.

However, the cost & pricing is a critical element for the potential success of the regulation, since access to broadband and broadcast networks on expensive or burdensome conditions leads to regulation that misses effect. *[confidential]*.

The vagueness of the concept of fair pricing and its undifferentiated application to both fiber and cable

The concept of fair pricing is not defined and remains vague. It will be applied to two types of networks which differ fundamentally. In the case of cable, it is a modernization of a network which will anyway take place ("Grote Netwerf") and is already well advanced while in the other case (fiber), it is a non-existent network with the exception of some experimental deployment areas.

We read that one of the arguments for treating the two technologies equivalently with a fair pricing approach is a request/comment made by the European Commission (see, for example recital §2005). However, the investment by cable operators for an increase *cq.* update of capacity do not justify a risk-related premium. This seems a far less risky investment compared to fiber. Furthermore, Proximus will probably have to maintain two networks in parallel, copper and fiber, while for the cable it is only a modernization of an existing network (so not two networks in parallel). The risk of wanting symmetry of treatment between cable and fiber when determining a fair pricing is to artificially inflate the cost of access to the cable network.

The market analysis should already emphasize that the concept of fair pricing should be applied differently to cable and to fiber or may lead to very different results. It should be clarified that in one

case, it is a modernization of a network, in the other case a greenfield deployment. This does not mean that the current pricing and conditions should not be revisited for the VDSL(2) network.

LRIC bottom up

A pure LRIC (Long Run Incremental Cost) model is based on incremental costs and allocates them to the services transported on the network that is modelled. It produces a floor cost of access to this network. Then there are its variants: LRAIC (Long Run Average Incremental Cost) / TSLRIC (Total Service Long Run Incremental Cost) where service specific fixed costs are taken into account. With TELRIC (Total Element Long Run Incremental Cost), there is an allocation of part of joint and common costs. One can apply a TELRIC + uniform mark up for the allocation of residual of joint and common costs. After LRIC, one can go into a FDC/FAC and a stand alone cost model. Each model has its own implications and consequences. We consider that just stating that a LRIC bottom up model will be applied is insufficient and too vague.

Even the LRIC concept is questionable: LRIC has been historically applied to regulate services (not a network as a whole) like MTR, roaming, interconnection and local loop unbundling. The big difference is that NGN offers services independent of the type of network because it is a converged multi-service network. Therefore it is much more difficult to apply the traditional cost causality principles.

NGN/NGA is a multi-services platform. They therefore have much more fixed costs or shared costs compared to legacy networks.

We believe that the design of a cost model based on services could be a good starting point for the Regulator. This would imply taking into account factors such as the OPEX + CAPEX of the service in scope and dividing it by the number of households. The CAPEX cost could be based on the previous years or, even better, an accurate forecast for the upcoming years. *[confidential]*. We believe the cost based model will also need to work in combination with the regulation of QoS.

Of course, the migration of a legacy network to a NGN network (fiber) requires the incumbent operator (e.g. Proximus) to maintain the first one when deploying the new one. We are aware that applying the MEA[2] method to the copper network would discourage any operator to invest in a NGN network since it could not recover his investment on his legacy network. It could decide not to invest.

But the cost of the copper network that would coexist with the fiber network cannot be transferred to the fiber network. This may easily happen via common costs or join costs. So we would like to flag the risk to allow Proximus to recover its legacy costs of its copper infrastructure on NGN networks during the transition period to NGN.

It should also be noted that the LRIC method applied to a NGN/NGA network could lead to incremental costs near zero, given the huge capacity available on these networks and their multi-service nature. Operators who implement a NGN/NGA network could therefore require larger increments to increase the cost of access. In our view, the allocation of costs for NGN and the underlying IP networks must better reflect the relationship between traffic volumes, service quality, and capacity. As mentioned earlier, an allocation key that uses the QoS and bandwidth needs should be the real cost drivers.

[2] Modern Equivalent Assets

The methodology of the costs that will be applied should also be evolutionary and the regulation that underpins it should be able to adapt to technological developments. It is essential that cost models reflect the reality of networks and, above all, their effective use.

Finally, the methodology based on cost, should ensure a "fair price" on both sides. On the one hand, the ability for network operators to recover their costs for granting access. On the other hand, the chance for new entrants to recover their learning costs. Since they are new into the market, it will be impossible for them to compete with companies that were already fine-tuning their operations year-after-year. To make it economically viable for new entrants, the learning costs should be taken into account when defining the fair price. One could imagine that a lower price is given for a defined period of time, to ensure new entrants have the ability to optimize their operations while having the ability to offer competitively in the market.

The timing for developing a cost model and the 3 intermediate options

The risk of having an intermediate situation is that it lasts for an indefinite period of time. It may be satisfactory for an operator who already uses a regulated access offer. It may have generated economies of scale or range. *[confidential]*.

The damaging consequences of the extension of the decision of 16-2-2016

The option for an extension of the decision dated 16-2-2016 (§1991) for cable access is worrying since it is clear that these conditions are not apt to foster several new entrants *cq.* competitors.

[confidential] the disadvantages of a retail minus-model. An investment incentive should not be based on existing retail prices as if the investment had already been achieved. In addition, cable operators have repeatedly shown their ability to bypass the retail minus methodology – definitely in a bundled offer strategy – to exert price *cq.* margin squeeze.

We thus welcome the willingness of the Regulator to (better) control the price squeezing (§ 28.5.3, § 37.5.3, § 19.7.4, § 27.7.4). Limiting the control of price squeezing only to a portfolio of products and not on individual products (except in case of doubts – see recitals §1205, §1759, §2018, §247) is not enough. Price squeeze should be monitored top down (via a portfolio of products) and bottom up (via individual products or via a portfolio of products especially dedicated to a market segment).

[confidential].

Key take-aways

[Respondent X] **regrets the lack of a greater ambition on:**

- The use of the traditional LRIC bottom up even for Next Generation Networks (NGN)
- The unknown timing for the development of the new pricing model, so that the Regulator proposes 3 temporary options whose validity is unknown
- The vagueness of the concept of fair pricing
- The undifferentiated application to both fiber and cable, while in one case the network must be deployed and in the other, it is simply updated

[Respondent X] **underlines the damaging consequences of the 3 temporary options.**

Our recommendations to the Regulator:

- Analyze and implement the concept of using a cost based model which includes factors such as OPEX, CAPEX and # households in case the QoS is regulated on the wholesale market
- Ensure that the fair pricing model, doesn't allow the SMP to recover its own legacy, migration costs during the transition period to the NGN
- Include in the fair price model the learning costs (e.g. discounts) for new entrants to make it economically viable for them to compete with the incumbents
- Avoid temporary solutions as they can last indefinitely and the lack of clarity will delay any investment on our part
- Look for an alternative besides the 3 temporary options, as their consequences are hurting new entrants and smaller players in the market that lack scale yet

4. QUALITY OF SERVICE

Context

We note that the remedies *"Provide access to a level of quality of service"* (§ 19.3.10, § 27.3.10, § 28.2.9, § 37.2.8) and *"Performance Indicators"* (§ 19.5.4, § 27.5.4, § 28.4.4, § 37.4.4) have not undergone major developments compared with the previous market analysis from the Regulator.

However, without renewed QoS regulations, a new entrant will not achieve a quality of service that is equivalent to the SMP operators. QoS is essential *[confidential]* to make an offer that is:

1. Credible for the customers
2. Competitive compared to the offers of the SMP

Control and Enforcement of Quality of Service

Three key principles should be at the basis of regulation to enforce an adequate level of QoS at the wholesale market:

1. *"Non-discrimination"* clause should be applied to the wholesale market to ensure the QoS that is acquired at the wholesale level allows the alternative operator to at least be equal with the QoS that Proximus and Telenet are offering to their own B2B and B2C customers
2. *"Most favored nation"* (MFN) should apply at the wholesale market to ensure Telenet and Proximus are giving the same QoS over time (e.g. improvements in broadband speed through the use of better technologies, should also be available at the wholesale level to avoid the creation of a new monopoly)
3. *"Audit right"* to check that the incumbents on the wholesale market are giving the same QoS to everyone. In this case, the Regulator could also have an additional role to make sure the operators granting access are compliant with the rules on *Non-discrimination and MFN*. In addition, alternative operators should be able to conduct audits (either by themselves, or through a third party) to check that there is no unequal treatment on QoS.

We note in the market analysis that the Regulator will have a central role for both setting up and enforcing performance indicators:

- To determine the types of performance indicators to be assessed and their level of detail
- To amend/modify them and ask for additional ones

Enforcement

Regarding enforcement, the Regulator has an important role, but we advocate also a role for alternative operators in this respect.

We believe that an alternative operator should be able to intervene in the control and enforcement. They should be able to initiate reasonable requests for new performance indicators and to modify them, or to modify the method of calculation if the performance indicators are not adapted to the reality in the field. The right of audit for the alternative operator would further ensure that the calculations and communications are done correctly.

Raw data should be open data to allow end users, OTT service providers, and alternative operators to verify in transparency the performance indicators of the SMP operator.

More diversity in performance indicators

[confidential] a minimum of 5 performance criteria should already be defined, at least in its principles, in «*Provide access to a quality of service level*» and «*Performance Indicators*», namely:

- Throughput upstream
- Throughput downstream
- Latency
- Jitter
- Packet drop rate

Of course, a distinction will be required for these parameters according to the connectivity part supported by the SMP operator and by the alternative operator (the SMP operator cannot be held responsible for a bad quality of internet peering if it is managed by the alternative operator).

Depending on the service offered *[confidential]*, the relative importance of each of these 5 criteria will vary. Others will certainly be expected in the future to allow an alternative operator not to be discouraged from offering a service via a Central Wholesale Access and for which there should be a specific/customized performance indicator.

If the alternative operator opts for a Wholesale Central Access, it should be able to have enough room of maneuver to define its own technical profiles for its end users. A simple copy and paste of the technical profiles of the incumbent towards its end users will prevent the new entrant from proposing a different or innovative service that might require very specific technology.

The various QoS indicators that are used today by Proximus and Telenet internally, could serve as the Service Level in the sector. Their existing KPIs and SLAs with B2B and B2C customers are already a broad set of indicators. This could serve as a starting basis to define a tailored set of KPIs for specific customer segments and will go broader than the 5 minimum KPIs on network quality.

From Quality of Service to Quality of end user Experience (QoS to QoE)

Today, regulatory requirements for the QoS and their metrics are:

- Primarily focused on the network and not on applications
- Not oriented towards the end user experience[3]
- Focused on the speed and throughput.

This is due to historical reasons: as long as the networks were slow, at the beginning of the Internet, it was logical to link QoS to performance. The marginal utility of an increase of throughput remained high.

[3] *[confidential]*

Today, maximum throughput[4] is higher than the needs of individual applications from the information society[5]: The marginal utility of an increase of speed becomes less important than the marginal utility of other criteria related to the quality of the user experience. There will be no more innovation or no more audacity in the development of killer applications (business-critical apps, safety-critical apps, apps requiring even more throughput) if nothing frames the quality of end user experience better than today.

Moreover, this end user experience depends not only on the performance of the service but also on the customer service. From this point of view, experience from alternative operators using a regulated access shows that the problem comes from the lack of information flowing from the SMP operator to the alternative operator. The latter cannot ensure a good customer service (cf. the eligibility criteria in the procurement and migration procedures, the repair procedures, intervention times, etc.). *[confidential]*. This is why *[Respondent X]* supports the proposition of the Regulator §19.3.9, § 27.3.9 and § 28.2.8, § 37.2.7 to access operational support systems or similar software systems (e.g. incident management systems).

The *"operational aspects"* which are addressed in the remedies for the market for local access, central access and broadcasting are essential. We strongly advocate the enforcement thereof.

Easy switch

For the customers it should be made as easy as possible to switch between providers. This is needed to ensure a qualitative switching service as a competitor or new entrant. We believe there is a role for the Regulator to ensure easy switch procedures and to prevent any exclusive commercial agreements by incumbents with integrator companies to ensure new entrants have sufficient access to qualified resources on the field. This was indeed a problem for Snow, the former television service of Base. The easy switch as it is today, puts, as indicated in previous memos, a strong burden on new (small) players.

Key take-aways

- ***[confidential]***

Our recommendations to the Regulator:

- Enforce QoS on the wholesale market through the principles of "Non- discrimination", "Most favored nation" and the right to audit
- Foster adequate fine-tuning of the KPIs based on the real needs of the customers and the new entrant
- Make the raw data of the operators available to the alternative operators
- Define a minimum of 5 criteria regarding the network quality: throughput upstream, downstream, latency, jitter, packet drop rate
- Create sufficient room to adapt in view of consumers with specific performance needs

[4] Evidently, there is a gap between maximum throughput and the average throughput. Since end users complain about this, this is an argument in favor of other QoS and performance indicators that address this.
[5] *[confidential]*.

- Focus of the KPIs should not only look at network speed/throughput but also on the end user experience (customer service, intervention time)
- Create a transparent and efficient access for alternative operators to operational support systems or similar systems (including incident management) to ensure a high quality customer service
- Refer to the internal set of QoS indicators of the incumbents that are used today for B2B and B2C customers, as a norm or guideline for the sector to monitor the performance
- Ensure easy switch procedures
- Prevent exclusive commercial agreements with integrator companies to ensure new entrants have sufficient access to enough qualified resources on the field

[condifential].

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