

**Draft Recommendation on Regulated Access to
Next Generation Access Networks (NGA)**

**ECTA response to Commission consultation
July 2009**

NGA Recommendation – summary

- 1. Competition and investment are mutually reinforcing objectives.** There is no trade-off. Supply (investment in 'pipes') and demand (innovation through retail competition) are needed simultaneously to support NGA business plans and achieve Europe's high speed broadband and growth objectives. Competition and investment may also take different forms. Investment in open networks drives complementary investment in core networks, content distribution, high tech business services and data centres – or outside the telecoms sector in businesses using telecoms services to boost productivity and sell online. Competition is not necessarily just amongst a few large scale operators offering mainstream consumer products, but also amongst business service suppliers, suppliers to Governments, suppliers to niche consumer markets or in communications-based products and services which have not yet been created – just think of the Internet in the early 1990s. The Recommendation should support markets which are open to innovation.
2. The Recommendation should be drafted bearing in mind that the objective of **effective competition has not yet been achieved** in many retail broadband markets despite long-standing regulated cost-based non-discriminatory access to copper lines. Moreover, there are significant downside risks to competition during any transition environment, as operators with existing ducts and building assets, a low cost of capital and a large market share transfer customers to the upgraded networks, both transferring and potentially enhancing existing market power. Europe has a poor history of handling telecoms leverage as evidenced by the numerous foreclosure cases arising from the transition from dial-up to broadband Internet. In this context, and given that new wholesale products are rarely effective from the outset, maintaining even existing levels of competition will require increased efforts and vigilance on the part of the Commission and national regulators.
3. The revised draft contains a **number of positive aspects**: in particular the move away from reliance on duct access to a ladder of investment approach involving a number of access products, the clear statement that unbundling obligations should apply without reference to architecture and the requirement for 6 months advance provision of wholesale products by dominant firms to prevent foreclosure.
4. However, the balance in the European Council conclusions and telecoms framework review has not been achieved. **Too much emphasis has been given to well-intentioned but potentially counter-productive strategies aimed at promoting investment and co-operative arrangements with too little attention to ensuring that competition and the principle of non-discrimination are preserved.**
5. **Regulation and its removal should be based on the outcome of a market analysis procedure which assesses the actual and reasonably foreseeable conditions** in the market. Regulation should only be removed from a market if it is found to be 'effectively competitive' in accordance with competition law. In this context article 41 should be clarified, whilst significant review is needed of the proposed impact of 'co-operative arrangements' on SMP and remedies. The Commission has in its article 7 Decisions routinely rejected market analyses based on structural indicators such as the number of operators in preference for a full market analysis which examines behavioural aspects. Some of the proposals made in this Recommendation would fundamentally change the rules of the game with significant risks of failure if prejudgements turn out to be incorrect.
5. **Provisions which reward a dominant operator for entering into a deal with one other player must be deleted** (articles 23, 24, 37-38, Annex III(1) etc). Such deals are inherently discriminatory, allow dominant firms to pick winners (or indeed losers), are difficult for NRAs to assess, create little regulatory certainty, fail to provide investment incentives, detract from achieving any fair multi-operator solution and could breach antitrust rules by laying the foundations for anticompetitive collusion. Remedies (including

cost orientation) should not be dictated and/or lifted on the basis of the existence of such deals but rather should be defined following proper analysis of the competitive situation in the market.

6. Multi-operator deals are in principle a positive scenario, but the model described (article 26, 42, annex III(2)) should be refined to avoid gaming by dominant firms and to ensure that it is genuinely compatible with the competition law concept of 'effective competition'. Multi-operator deals should not be considered as contributing to effective competition unless the terms and outcomes resulting from such arrangements are found through a market analysis to genuinely indicate absence of dominance. We suggest in this context amendment to the conditions in Annex III as follows:

- (i) the 'number of operators (unspecified), their market shares, prices and trends in the market resulting from such deals are compatible with 'absence of dominance' under competition law; and
- (ii) the dominant firm does not exercise or have the option to control the co-investment vehicle; and
- (iii) barriers to entry are addressed within the structure in a way that ensures that demand for residential and business-grade wholesale products from innovators in retail markets will be met on an ongoing basis.

7. 'Term' discounts (annex 1.7) contain a capex and volume component and are inherently specific to those operators which can pass the relevant threshold. Consequently, and in line with revisions to the EU Framework, the Commission should clarify under which conditions term discounts would not have discriminatory effect favouring the incumbent or a narrow oligopoly and are compatible with promoting effective competition for consumers and businesses. In particular, term discounts should not be permitted until the retail market is sufficiently developed that the number of operators that can realistically take advantage of the discount is compatible with effective competition. Once this threshold is reached conditions associated with term discounts should include that:

- (i) the relevant products are offered on the basis of equivalence. This is necessary to address enhanced incentives by the dominant firm to discriminate against operators with commitments to prevent them from benefiting from these commitments.
- (ii) the highest discount category is compatible with effective competition and takes account of existing and achievable market shares and access to capital
- (iii) The discounted price should reflect the 'risk-free' cost assessed across the total number of lines committed by all operators to avoid double counting

'Volume discounts' (annex 1.8) without a term requirement should be penetration/area specific rather than operator-specific to reflect the relevant (penetration-related) cost drivers and ensure there is no discriminatory effect between operators.

8. Greater emphasis should be placed on 'equivalence', particularly given that non-discrimination has been affirmed as a key principle in the review of the EU telecoms framework, and that recent ERG best practice guidance has highlighted the importance of effective rules to protect against both non-price and price discrimination.

- (i) **The 'equivalence' provisions in Annex II should apply to any access product where dominance is enduring including fibre-based access and not just ducts.** Equivalence should also be a pre-requisite for any operator-specific discount schemes (e.g. term discounts) to address additional discrimination incentives. Equivalence of inputs should be required wherever new systems are being constructed to build in cost-efficient non-discriminatory systems from the outset.

(ii) **A further annex should be included outlining high level recommended principles and procedures for margin squeeze tests.** We do not however consider (particularly in the absence of functional separation) that margin squeeze tests alone can replace pricing rules.

9. Multi-fibre is in principle a positive architecture which can provide further options for competitive development. However, the existence of multi-fibre does not affect the dominance of the firm which has installed the multi-fibre. Moreover, economic models from WIK suggest that, even where costs are shared perfectly between operators on a regional basis, multi-fibre is unlikely to lead to economically viable and effective competition except between multiple operators with similar penetration prospects in dense areas. In this context, **multi-fibre should be pursued where it delivers clear benefits but without assuming the competitive outcome in advance.** The two scenarios in which the Commission could usefully promote multi-fibre opportunities, but not to the exclusion of other wholesale products are:

(i) Building by building: including in the market 4 reference offer the **option for an entrant to 'order' multi-fibre installation to a specified building on cost-based terms;** additionally multi-fibre in the terminating segment could be addressed as a facility sharing obligation on all operators under national legislation.

(ii) Multi-fibre in a co-operative deal: the use of multi-fibre within a multi-operator co-investment scenario to enable each operator to fully manage their own network.

Point to point single fibre may be sufficient under other circumstances.

10. We are pleased that reference has been made to the need for dominant firms to make available business-grade products. However, it is not clear how regulators should carry out the analysis to determine which products are needed and the relevant geographic availability and pricing arrangements. **Business supply and demand should be separately considered within the market analysis – in particular as a 'segment' of markets 4 and 5.** Business service providers connecting customers over wide geographic areas simultaneously tend to have limited scale at a national level. This means that they would normally not be able to benefit from any term/volume discount or 'co-operative arrangement' between national large scale operators. Nor would they necessarily be served effectively where downstream regulation is removed due to the availability of fibre unbundling as described in para 41. A separate market consideration is therefore warranted which may lead to a different geographic scope and pricing rules. Equally the product and geographic needs of mass-market consumer suppliers could usefully be considered separately from business within market 5 – focusing on multi-cast capability and the location of hand-over points at or close to the MDF particularly eg in a vDSL scenario where no effective physical access product is available..

11. We find the proposals on migration procedures broadly positive. In particular we agree that parallel running should be required over a sufficient period to allow returns for competitive investors unless an agreement is reached with competitors for a shorter transition or fully equivalent access is granted at the same interconnection location. However, it would be helpful to include aside from any specific minimum recommended periods the more general principle that **migration process should be supervised by the NRA and should not have the result of or should otherwise compensate adequately for any stranding of the assets of competitive investors.** This principle is particularly important to prevent any chilling of further investment in unbundling (including in countries where LLU has only recently become operational and 5 years may not be sufficient to secure a return). We would also suggest strengthening requirements for transparency and consultation, and providing if necessary for penalties if such requirements are not met. A further issue relevant to transition is the need to **ensure that there is no double counting of costs or risks between copper and fibre networks** in the pricing for relevant access products.

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1. Investment and competition

1.1 Competition and investment are mutually reinforcing. No trade-off

A very important principle that should underline the approach to the Recommendation is that competition and investment are complementary and mutually reinforcing objectives. There is no trade-off. In order to achieve Europe's fibre deployment and take-up targets both should be pursued simultaneously – to provide the 'supply' and 'demand' conditions for Europe's digital economy.

The dual role of competition and investment is not theoretical, but supported by the Commission's 2006 Impact assessment on the Review of the Telecoms Framework and backed by hard evidence and long experience throughout the evolution of the telecoms sector.

During the monopoly period prior to liberalisation and regulation, investment was both stagnant and clearly less efficient than in the current regulated environment. The pace of evolution of networks – from analogue to digital, from ISDN to ADSL and from copper to fibre networks in the core was slower in times of monopoly than more recently under regulated competitive conditions.

Since markets were liberalised in the 1990s, clear gaps have emerged between countries which took firm action to promote competition and which also often benefited from higher investment levels and countries which failed to act and have often lagged both in investment and in the development of high speed services. Although a rough benchmark, it is interesting that high marks in the ECTA regulatory scorecard (which aims to measure the effectiveness of regulatory regimes) have consistently been associated with higher investment levels in the telecoms sector. The reverse has certainly never been proven.

More evidence of how competition stimulates and supports network investment can be found by looking at how particular countries have evolved – comparing earlier periods when regulation was limited or less effective with later periods where firmer action was taken.

A particularly interesting example is the UK which from an initial sluggish base as an unbundling laggard became one of Europe's broadband leaders. This transformation occurred because open access regulation stimulated investment by entrants, which installed high speed equipment on the incumbent's lines driving demand for new and faster services, triggering a response by the cable operator and by the telecoms incumbent. Ultimately this virtuous cycle of competitive investment spurred both cable operators and the incumbent to upgrade to NGA because the market had been created for higher speed services.

Looking now at NGA, we see a very familiar story compared with the early broadband phase. Extensive vDSL networks have been deployed in Germany and Belgium with relatively few benefits to consumers and apparently limited payback to the investors. Just enough additional service benefits have been offered by the dominant firms to make their offer attractive compared with those offered via ADSL by competitors – enabling them to gain market share at the expense of rivals - but without sufficient innovation to expand the market. Deutsche Telekom's vDSL-based offer has been taken up by only 2.5% of the addressable customers. Belgacom's vDSL-based service offers just 4, 12 or 18 Mbit/s downstream Internet, with or without TV (with the low speed triple-play price at double the price in France and in The Netherlands and the high speed triple-play price at triple the prices in France and in The Netherlands, but with all

Internet speeds being below those being offered in the neighbouring countries using ADSL2+¹), i.e. the offers are well below the capability and speeds that would be expected in a competitive environment. There has certainly been no step change in the offers available. Even if the underlying wires were fibre it is unclear that the dominant operators would have either the incentive (given a preference not to cannibalise revenues from highly priced services) or the expertise to make the full use of the capacity available.

Only a strategy which combines investment in infrastructure with an open and competitive model for equipment, services and content will deliver the demand needed to pay for significant and widespread investments. Europe can debate endlessly whether there is demand for fibre-based services to justify risky investments. But that demand will probably not materialise and the investment will consequently remain 'risky' and marginal unless service innovation is a key component of the investment model. We may not know what the killer app is, but we are certainly less likely to find it if the retail market is restricted to one or two specialists in network construction.

We should also not forget that the successor to fibre networks exists some decades down the line. If we fail to ensure that we make the most of today's 'next generation' high speed technology, we risk a knock-on effect undermining the case for investments in the future.

The conditions for competition are supported through the availability of non-discriminatory access to bottleneck facilities allowing innovation to thrive. The conditions for efficient investment are supported through ensuring a fair pricing regime for access which reflects investment risks and enables efficient build/buy decisions by competitors. None of these principles has been significantly changed through revisions to the EU Telecoms Framework. The Commission should focus in the Recommendation on elaborating how these basic principles work with an equal focus on fair pricing regimes and on finding a solution to effectively enforce non-discrimination – an area which has been particularly difficult for regulators to address.

1.2 Competition and investment take many forms

There has been extensive focus on promoting investment in telecoms infrastructure – particularly access networks. However, it is worth remembering that there are many other forms of investment associated with telecoms networks that cannot be made unless networks are fully open to competition. Investment in backbone networks remains important as demand for capacity increases. Investment in content distribution and web hosting, software-as-a-service, cloud computing systems, etc. typically increase with competitive telecoms networks. Furthermore, investment in advanced secure communications services for businesses cannot happen without ubiquitous open networks, and without these networks, businesses themselves cannot increase productivity to drive investment outside the telecoms sector. The ICT multiplier effect on economic growth could simply not be achieved. The same is valid for the delivery of essential public services by public administrations.

When considering competition, policy-makers often focus on large scale consumer broadband providers. This kind of competition is clearly very important. But there are other forms of competition that are also important in maximising the potential of the telecoms sector: competition in business services; competition delivering niche services to consumers; and competition enabling creativity (and creative destruction) through the entry of perhaps as yet

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http://www.belgacom.be/private/fr/jsp/dynamic/product.jsp?dcrName=bun_aio_light&detailPage=_bun_aio_feature

http://www.belgacom.be/private/fr/jsp/dynamic/product.jsp?dcrName=bun_aio_light&detailPage=_bun_aio_price

unknown providers with new and innovative offerings. The first providers of dial-up Internet access are just one example to recall; clearly they were not the telecoms incumbents; nor did their innovative service depend on significant network investments. Furthermore competitive telecoms service markets tend to address through commercial rather than regulated means potential bottlenecks in downstream markets such as the 'openness of the Internet'.

Europe cannot afford to close off the telecoms sector to any of these sources of innovation. It is therefore important to look beyond an 'ideal structure' involving a certain number of players offering specific services to specific types of consumers and instead consider a model which inherently enables operators with innovative ideas to serve whichever market segment they are targeting and deliver benefits to their customers.

1.3 Competition has not yet been achieved

A very important consideration for the Recommendation is that – even in today's broadband environment - Europe has not achieved the objective of effective competition in the telecoms sector.

An examination of retail broadband markets suggests that retail consumer broadband competition has developed in a few countries such as the UK where the regulator has taken tough action to open the market, but that in most countries there is a significant imbalance in market positions, with the incumbent retaining on average 45% market share whilst leading rivals lag with between 10-15%.

Meanwhile some markets including Belgium and Poland and other new member states remain severely underdeveloped and underexploited with only a marginal presence for competitors and limited service variety.

More worryingly still, the Cocom Broadband report shows that the trend towards retail broadband competition has stalled in the last two years. It is worth noting that the failure to achieve competition comes despite supposedly cost-oriented access to legacy copper infrastructure on non-discriminatory terms, typically without any volume or term discounts, because these are often considered 'discriminatory' by NRAs.

These remarks concern consumer and small business broadband, which has been well-documented. But the situation for service provision to medium and large scale companies including multi-site and multi-national corporations is less clear. Incumbents often retain an even higher share of corporate customers than in the residential market.

This picture should send serious alarm signals to the Commission that a further relaxation of the rules is likely to lead Europe even further away from meeting its liberalisation target for telecoms, and clearly entails major risks of undermining the single market.

Countries with poor competitive records have not outperformed in investment either. This implies that the most likely outcome if Europe back-pedals on telecoms liberalisation is that neither enhanced competition nor investment will be achieved.

In this context, the NGA Recommendation should actively explore how competition can be achieved through improving and strengthening existing regulatory approaches – for example through better enforcement of non-discrimination and equivalence of treatment between dominant and non-dominant operators. It is not obvious that this challenge has been taken up in the draft NGA Recommendation.

1.4 High risk of further foreclosure

Some dominant firms have argued that the installation of fibre lines changes the dynamics of dominance pointing out that as of today most fibre lines have been installed by competitors. It is true that competitors have been the first to invest in this market. This was also the case in the early days of dial-up Internet and broadband deployment; it was not incumbents but others – ISPs and cable operators – that led the way in offering new services.

However, the overarching question remains whether incumbents have the power to ‘act independently of competitors and ultimately consumers’ in the relevant markets including when fibre is taken into account.

On the question of whether the relevant markets relating to broadband include fibre, all the evidence (and Commission statements such as those in the two comments letters on the Spain market 5 case (the Spanish NRA had initially proposed a cut-off at 30 Mbit/s)²) suggest that there is a continuum of demand for ever greater speeds irrespective of technology. Broadband speeds have increased 10x since the beginning of the decade. Moreover in countries such as Japan with extensive fibre, there is very clear evidence of direct substitution from DSL. Even if separate markets were found, importantly, the economics show (confirmed in studies by WIK, Analysys, OECD and others) that the last mile is difficult to replicate and would be likely to pass the 3 criteria test.

As regards dominance, whilst incumbents are typically followers rather than leaders when innovations are introduced, they have inherent advantages that will translate directly across to fibre. They own the underlying extensive duct system which is operationally difficult to access, they own legacy buildings which can be sold in part payment for fibre upgrades, they control on average 80% of the wholesale market for broadband – customers which can be directly transferred to any replacement network, and benefit from very substantial legacy cashflows providing significantly better access to capital than is available to most rivals. These advantages are typically exploited by incumbents through refusing to meet demand from other operators for wholesale access on fair terms (acting independently of competitors) in a way which they could not sustain in a truly competitive market. Conversely, when entrants invest in fibre, their market shares are usually so limited that they must offer wholesale access to ensure sufficient take-up to pay for the investments.

Ultimately, incumbents must over time upgrade their existing networks to more modern fibre technology, and during this process there will be a considerably enhanced risk of existing levels of competition being reduced through foreclosure. This same experience has occurred repeatedly in the history of the sector since liberalisation – for example when incumbents introduced ‘flat-rate’ dial-up Internet packages through upgrading core networks with fibre clawing back market share from the original providers of per minute dial-up Internet access. It happened again most notably when narrowband Internet was upgraded to broadband through further core network upgrades and investment in DSLAMS, particularly in countries where unbundling was not effectively available. This foreclosure process at the beginning of broadband roll-out resulted in a number of high profile margin squeeze cases being taken up by the Commission (including in France, Germany and Spain).

However, these cases were finalised (and in some cases have yet to be finalised) long after the effect on the market and significant reduction of competition. It is also notable that throughout the history of liberalisation, new wholesale products have always taken time (often years) to become effective. A situation where competition is already stalling and where further competition depends on new wholesale products requires particular vigilance by the Commission and regulators and by no means a reduced focus on competition.

² <http://circa.europa.eu/Public/irc/infso/ecctf/library?l=/espaa/registeredsnotifications/es20080804-0805&vm=detailed&sb=Title>

2. Interpreting the European Council conclusions

2.1 Commission proposals fail to meet competition requirements

The Commission has cited conclusions reached by Heads of State in the Spring 2009 European Council as the primary reason for increasing the focus on ‘investment’ and ‘co-operative arrangements’ in the NGA Recommendation.

Whilst we accept that there is a need to discuss the principles agreed in the European Council, the overall impression from the draft Recommendation is that there is an over-focus on ‘investment’, and an underlying presumption that relaxing or differentiating competition rules would promote investment (contrary to the analysis shown above, contrary to what is commonly accepted by NRAs, and contrary to the Commission’s own conclusions in the Impact Assessment accompanying the 2006 Review proposals). The result is ‘opt-outs’ or variations from today’s standard regulatory principles that in some cases seem incompatible with competition and non-discrimination, and with the Commission’s own criteria for analysing markets in its comments letters on NRA notifications relating to markets 4 and 5 under the article 7 process (see especially UK, Spain, Finland Market 5, which all emphasised the need for actual competitive conditions to be proven beyond the number of operators, existence of arrangements or particular architectures).

We do not find these adjustments warranted by policy objectives or supported by the European Council conclusions or the revisions to the EU Telecoms Framework.

The main draft/agreed provision which receives the Commission’s attention is NRA objectives (article 8(5)d Framework Directive) as follows:

(d) promoting efficient investment and innovation in new and enhanced infrastructures, including by (1) ensuring that any access obligation takes appropriate account of the risk incurred by the investing undertakings and by (2) permitting various cooperative arrangements between investors and access seeking parties to diversify the risk of investment, whilst (3) ensuring that competition in the market and the principle of non-discrimination are preserved;

Examining this provision in the context of related draft/agreed recitals and articles we would interpret the three segments (numbering added) as follows:

1. Access obligations applied where SMP is found should take account of the investment risk – primarily through adjustments to the price (article 13 Access Directive, recital 43d Better Regulation Directive) and the period of the market analysis process and pricing mechanism (volume and term discounts may be permitted provided they have no discriminatory effect and are compatible with promoting effective competition in services to consumers and businesses – recital 43b Better Regulation Directive).
2. Co-operative arrangements should be ‘permitted’ (i.e. not prohibited). This is particularly relevant in view of the fact that such arrangements might be seen as breaching competition rules on collusion. There is no suggestion that such arrangements should be ‘encouraged’, ‘promoted’ or that they affect the market analysis process. Nor is there a logical link between ‘co-operative arrangements’ and access ‘obligations’ – addressed in the preceding phrase. The presumption must be that such arrangements are voluntary as opposed to being part of the mandatory access regime.
3. The previous two statements are qualified by the overarching requirement for regulators to ‘ensure’ (i.e. a mandatory requirement) competition in the market (through the market

analysis process under which remedies must be applied if SMP is found) and to preserve the principle of non-discrimination (i.e. that operators in similar situations should be treated in an 'equivalent' way. In this context the obligation for an SMP operator not to discriminate between itself and other operators (article 10 Access Directive) is a central principle.)

Whilst focusing intensively on the 'co-operative arrangements' aspect of draft/agreed article 8(5) FD, the draft Recommendation appears to neglect or deprioritise other areas of the draft/agreed revised telecoms framework which put further clear emphasis on the need for non-discriminatory access to NGA networks and on ensuring effective competition:

- **Access confirmed as fundamental SMP obligation:** draft/agreed changes to article 12 Access Directive oblige NRAs to consider 'how' rather than 'whether' access obligations are proportionate when taking account of the risk incurred. This change suggests that riskiness could influence how – but not whether – access obligations should be applied.
- **Unbundling obligation now extended to fibre:** draft/agreed changes to article 2, 9(4) and Annex II Access Directive to remove reference to 'metallic' and 'twisted pairs' effectively require operators with SMP in market 4 to extend the unbundling reference offer to cover fibre in addition to copper on a technologically neutral basis. The inclusion of these products in a reference offer also implies that they should be available on transparent and standard terms to all operators.
- **Principle of non-discrimination further emphasised:** the principle that operators in similar circumstances should receive equal treatment is enshrined as a principle in draft/agreed article 8(5) FD and again in connection with the provision on 'new and enhanced infrastructures'.
- **Effective competition (including for businesses) retained as target of market analysis process, further emphasised in recitals:** Article 16(4) FD remains unchanged, requiring appropriate regulatory obligations wherever there is no effective competition. Recital 43b (Better Regulation Directive) requires that "Any access conditions imposed should respect the need to preserve effective competition in services to consumers and businesses." Recital 43a (Better Regulation Directive) states that "Competition can best be fostered through an economically efficient level of investment in new and existing infrastructure complemented by regulation wherever necessary to achieve effective competition in retail services."

The draft/agreed changes made to the EU Framework mean that a discussion of volume and term discounts is useful. The Recommendation should, in light of the revisions to the Telecoms Framework, in particular focus on the mechanisms that would ensure that such discounts have no discriminatory effect and are compatible with promoting effective competition for the benefit of consumers and businesses. It is also appropriate in this context, for the Commission NGA Recommendation to discuss the calculation of a risk premium on the cost of access.

However, the discussion of 'co-operative arrangements' should be focused solely on those (multi-operator) arrangements which are genuinely pro-competitive and non-discriminatory and thus might be relevant to the NRA's market analysis conducted in accordance with competition law principles. Arrangements by dominant firms which fall short of this outcome and effectively exclude certain parties or create an unbalanced market structure are unlikely to positively affect the competitive dynamics of the market and by definition involve discrimination. We therefore do not see how these would be compatible with the European Council conclusions.

In parallel to finding a more balanced perspective on 'investment' and 'co-operation', the increased emphasis in the draft/agreed revised telecoms framework on non-discrimination should be further recognised in the Commission's draft NGA Recommendation. The principle of

'equivalence' in non-price conditions should be applied to any form of access in which there is an enduring bottleneck – i.e. not just to ducts, but also where relevant to fibre. Additionally there is a need to provide more details on how to ensure the absence of price-discrimination (without neglecting non-price discrimination), particularly through well specified margin squeeze tests.

3. Investment and co-operative arrangements

The Commission proposes to address the investment component of the European Council conclusions through three distinct provisions covering 'deals between dominant firms and one or more other operators' (para 23-24, Annex III(1) etc), multi-operator deals (Annex III(2)) and volume and term discounts (Annex I).

Discussion about multi-operator deals and volume and term discounts is relevant, although requires amendment to better ensure that these provisions are compatible with competition and non-discrimination. We do not find the discussion of two-operator deals involving a dominant firm to be constructive or consistent with the regulatory framework and we strongly advise deletion. Our proposals and explanations are given below.

3.1 Differentiated pricing – discounts

In view of draft/agreed amendments to the EU Framework, it may be useful for the Commission to address the question of differentiated pricing arrangements – and particularly term and volume discounts – although it cannot prejudge the outcome of the legislative proceedings. Much of the discussion in the draft NGA Recommendation is constructive. However, insufficient safeguards have been given to ensure, in accordance with the current Framework and the draft/agreed amendments (recital 43b), that any discounts 'have no discriminatory effect' and are compatible with 'promoting effective competition for consumers and businesses'.

It should be recalled that a major failure of EU telecoms policy is that despite 10+ years of full liberalisation during which entrants have been the primary innovators (in dial-up Internet, broadband, triple play, Ethernet for businesses, etc.), retail consumer broadband markets have remained dominated by incumbents with an average of 45% market share (or more than 50% if resale is included). The situation varies country by country but the leading competitors in the more 'competitive' markets have typically reached no more than 10-20% market share, whilst in many markets, the scale of competitors is less than this.

In this context, it is particularly important that the conditions agreed by Governments relating to non-discrimination and effective competition are met. This would tend to suggest the need for substantial safeguards on differentiated arrangements to avoid these mechanisms from benefiting the incumbent alone or a narrow oligopoly which does not deliver effective competition and excludes national or multi-national business service provision.

3.1.1. Long term contracts

A key component in long term contracts is that they consist of a commitment to purchase given volumes over a certain period. This scenario is therefore operator specific in that it is open only to those that have the necessary capital and volumes to participate. The incumbent will always meet the threshold requirement, but this model will have a serious discriminatory effect which is not compatible with promoting competition if it results in benefits for one operator or a narrow oligopoly of operators effectively locking in advantages including high cashflows and profits for one company or those few companies, whilst undermining progress towards effective competition.

Another serious concern with this scenario is that the incumbent can further benefit at the expense of its rivals if it discriminates in the access conditions to prevent competitors from achieving or retaining the necessary volumes to benefit from the discount arrangement. A perfect outcome for a dominant firm would be to sell long term contracts to defray its risks and lower its own costs, whilst keeping competitors costs high by hindering them from achieving (committed) volume targets.

As a result of these fundamental problems, many telecoms regulators have actively prohibited or limited requirements for binding forecasts with penalties – for example in the context of local loop unbundling and interconnection. The issue of potentially discriminatory effect for such arrangements is explicitly addressed in recent ERG guidance on best practice regulation in the broadband market and in their guidance on the application of remedies.

In view of this, it is extremely important, if any guidance is to be provided by the Commission at all, that it describes circumstances in which purchase commitments would have discriminatory effect and therefore be prohibited.

In particular, given regulators' objective to promote effective competition, term discounts should not be permissible (as incompatible with the competition objective) until such time as the number of operators that could realistically participate in such schemes, given existing market shares and access to capital, is compatible with effective competition. In some markets, such as Spain, Belgium, Poland and others including new member states competition is only barely beginning to emerge. Failing to set a threshold of this kind would lock in benefits, cashflows and retail pricing advantages for one or a limited number of operators making achievement of competition objectives even further removed. Once the threshold is passed, the following conditions should be attached to term discount arrangements to address discrimination incentives from the dominant firm and ensure the system is compatible with effective competition.

- (i) the relevant products are offered on the basis of equivalence. This is necessary to address increased incentives by the dominant firm to discriminate against operators with commitments to prevent them from benefiting from these commitments.
- (ii) the highest discount category is compatible with effective competition and takes account of existing and achievable market shares
- (iii) The discounted price should reflect the 'risk-free' cost assessed across the total number of lines committed by all operators to avoid double counting

Given inherently different volume characteristics, business-grade products should be assessed separately from mass-market consumer products in the relevant markets.

To ensure that pricing is appropriately and consistently treated any proposed term discount arrangements involving SMP operators on markets 4 and 5 should be subject to notification to the NRA, and any draft NRA decision to approve (or amend, such power should be available to NRAs) such proposed notification should itself be required to be notified to the European Commission.

3.1.2 Volume discounts

With high fixed costs, per unit costs in very high speed broadband are likely to decrease as penetration expands. In this context, it may be relevant to permit lower wholesale access (unbundling and bitstream) charges once volume targets have been achieved.

However, for the same reasons as described above in relation to term discounts, volume discounts carry a serious risk of discriminatory effect, locking in advantages for the dominant

operator or a limited number of firms with higher market shares and undermining achievement of effective competition.

Potential competitive problems with such discounts have been recognised by regulators which have often prohibited such discounts ex ante, and in some cases removed ex post volume discounts which have clear anti-competitive effects. For example, OPTA in Dec 2005 prohibited previously practised discounts in the transit market (especially transit to mobile networks) on the basis that such discounts tended to support uncompetitive market structures. Similarly in the rules applying to FTTH, OPTA prohibited operator-specific discounts.

Furthermore, the cost savings/risk reductions associated with higher volumes are nearly entirely related to overall scale and penetration achieved compared with expectations of total lines sold in the business plan and are not specific to any particular operator in this regard, nor do they reflect any defraying of the risk through up front commitments given by any specific operator.

To ensure no discriminatory effect and set pricing mechanisms compatible with overall 'penetration risk', such discounts should explicitly relate to the total (combined) penetration rather than being operator-specific. Moreover, volume discounts should reward only the risk/cost reduction associated with the effective quantity of fibre lines or bitstream connections that are purchased and not be tied to any ex ante commitment. Reference should also be made to antitrust rules on quantity discounts - and their difference to loyalty rebates.

3.2 Multi-operator deals

Para 26, 42 and Annex III(2) aim to describe multi-operator co-operative arrangements in which the conditions are such as to 'indicate' effective competition, a concept defined as equivalent to 'no dominance' under article 82 of the Treaty.

We agree that in theory multi-operator arrangements have the potential to result in effective competition, but we do not find that the conditions described in annex III(2) sufficiently capture the meaning of 'no dominance' under the Treaty, nor do they seem compatible with the existing or draft/agreed evolution of the EU regulatory framework which 'permits' co-operative arrangements without reference to impact on the market analysis process. Nor are the conditions proposed sufficiently clear and robust to avoid gaming by dominant firms whose objective may be to avert or delay regulation through holding out the possibility of a multi-operator arrangement that they do not intend to fairly honour, or to select partners which minimise the threat of future competition.

Hypothetical expectations are not an appropriate test. Rather, objective analysis of existing market circumstances and forward-looking trends based on past experience is the only relevant test for absence of SMP – consistent with Commission comments on the UK, Spain and Finland for market 5.

In this regard, if Annex III(2) is retained, appropriate reference should be made within the conditions to: (i) established antitrust rules, and (ii), the procedures of the existing and of the draft/agreed evolution of the EU regulatory framework, which should not be replaced or mitigated by criteria laid down, or indications given, by the Commission.

Our key suggestions for improvement to Annex III(2) on this basis are as follows:

- **No reference to specific number of operators.** In order to meet the conditions for 'effective competition', the Annex (if maintained) should not give as a criterion a specific number of operators (which could be meaningless if the operators in question are small

in scale or are selected to limit competitive challenge to the incumbent³). Instead the primary criterion should be that **the number of operators, market shares, prices and trends at wholesale and at retail levels are indicative of an "absence of dominance" as defined in accordance with Article 82**. This would also ensure that the NGA Recommendation is compatible with Commission's comments letters issued under the article 7 process.

- **The co-investment vehicle must not be controlled by the dominant firm:** to prevent unequal and discriminatory conditions from being set (or afterwards determined) within the management vehicle for co-investment, it is essential that the dominant firm has no control or option to control the co-investment vehicle⁴.
- **Barriers to entry must be addressed** such that there are reasonable guarantees within the co-investment structure that demand from operators requiring wholesale products in market 4 and 5 to innovate in consumer and business markets will be met on an ongoing basis. This is an important requirement and relevant to the 'no SMP' assessment as well as the Commission's '3 criteria test' which includes the condition that there should be limited barriers to entry and expansion. Multi-operator co-operative arrangements carry the disadvantage that they can lock in a given number of operators with virtually no possibility for further entry at a later stage. This could encourage collusive outcomes and limit the potential for an innovating entrant to 'rock the boat' to the benefit of consumers. It would also undermine the ability of national or pan-European business service providers to compete, including across the single market. Solutions to the wholesale problem could be found either through commitments for supply of effective products to residential and business providers made when approving a co-operative structure or, potentially, structurally within the arrangement itself – for example if one of the investors specialises in wholesale supply and lacks the incentive to discriminate. If wholesale markets remain or become uncompetitive despite earlier expectations to the contrary, regulation should be applied.

3.3 Two operator deals (para 23-24, Annex III(1))

The Commission proposes that regulatory rules applying to other operators may be relaxed if a dominant operator offers equivalent access to (para 23) or co-invests with (para 24, Annex III(1)) one other operator of its choice. We have concerns of principle, as well as legal and practical problems, with this provision as follows:

3.3.1 Discriminates amongst operators

In this scenario, a dominant firm is allowed to 'discriminate' amongst its competitors by offering different terms to its chosen 'partner' compared with other operators. This 'discrimination' is contrary to the existing and draft/agreed EU Framework and European Council conclusions and appears to explicitly reward a behaviour that is identified as being indicative of anti-competitive behaviour in article 82 of the Treaty as follows:

³ The Commission itself, in the Article 7 comments letters on UK Market 5, Spain Market 5 and Finland Market 5 has ruled out mere reliance by NRAs on structural indicators such as the number of operators as a representative criterion, and has explicitly insisted that the test include detail behavioural analysis to determine the presence/immediate prospect of effective competition on the market and on the markets downstream thereof.

⁴ It should be recalled that under Competition Law effective control of a company can occur even when there is less than 50% ownership and that cross ownerships should be scrutinised.

Any abuse by one or more undertakings of a dominant position within the common market or in a substantial part of it shall be prohibited as incompatible with the common market in so far as it may affect trade between Member States. Such abuse may, in particular, consist in:

(c) applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage.

3.3.2 Dominant firm picks winners

Under this scenario, the dominant firm may choose its partner from amongst its competitors. This allows the dominant firm to pick ‘partners’ on grounds which are most likely to be self-interested as opposed to in the interests of competition and investment in the market as a whole. For example, the incumbent may be tempted either to choose a large rival in selected areas in order to encourage a duopoly in the retail market, a rival targeting a different market segment, or an entirely new entrant with no experience in the telecoms market, with a view to retaining the leading position for itself whilst discriminating against operators challenging it more directly. In extremis, incumbent operators could even partner with partially or wholly owned subsidiaries.

Differential treatment is likely to lock-in the position of operators in the market as selected by the dominant firm. For example, lower costs for the dominant operator and its chosen partner will result in higher cashflows for the dominant firm and possibly (but by no means certainly) for the partner compared with others, impacting their relative ability to make further investments and secure higher returns on investment.

What is clear is that such a proposal invites the incumbent operator to identify strategies to avoid appropriate regulation and to thwart competition. Such a variety of strategic options arise that it is impossible to anticipate all eventualities, therefore the only effective control is to remove this option and rely on a full and proper market analysis.

3.3.3 Changes rules of the game for market analysis

The Commission has very clearly stated in the context of the article 7 procedure (most notably UK, Spain, and Finland market 5 comments letters referenced above) that in order to vary or segment remedies significantly, it is necessary in the context of the market analysis, to identify circumstances and areas which result in sufficiently different competitive conditions to warrant such segmentation.

The Commission has also stressed that the different competitive conditions must be identified according to criteria associated with ‘dominance’ and cannot be rigidly defined with reference to a few specific parameters such as the number of market players. In particular, the Commission has identified the need to look not only at structural characteristics such as the number of players but also at factors such as market shares and the trends of market shares, at regional differences in pricing and pricing trends and at the incentives for commercial provision of wholesale offers.

By proposing (para 23) that the existence of an access agreement or co-investment (para 24) with just one other player alongside a specific network architecture is sufficient justification for varying remedies the Commission appears to be departing very significantly from its own decisions in article 7 cases. It is unclear how these criteria relate to the normal considerations that would indicate dominance (or otherwise) in the market in accordance with article 82 of the Treaty. Certainly, such a proposal creates uncertainty about how the practice which is established and understood might change in the future.

It is also unclear as to why, without evidence, the Commission appears to be suggesting that the existence of multi-fibre absent other market indicators should make such a significant competitive difference as to warrant differential treatment of this kind.

The shift towards pre-identified structural indicators is at odds with Commission practice in the past.

3.3.4 Does not incentivise investment

We understand that the two operator scenario has been presented because the Commission believes that it will incentivise investment and promote multi-fibre architectures. Whilst we agree with the goals (investment and competition), we fear this scenario will actually have a damaging effect on investment and will lock in regional pockets of collusive duopolies which would be difficult to address under existing case law, whilst there are other and better ways to encourage positive architectures and to actually achieve effective competition, which this scenario clearly fails to achieve.

This scenario presupposes that the ability to discriminate will encourage a dominant firm alone with one access partner (para 23) or investing together with one other firm (para 24, Annex III(1)) to invest. For this scenario to hold true, the participating operators must believe that by discriminating they can secure greater retail advantages (otherwise how would they benefit compared with an arrangement whereby they co-invest in access but offer non-discriminatory arrangements with a fair access price in downstream markets).

But all the evidence from narrowband and broadband indicates clearly that building a market in which two players have an in-built advantage in the retail market reduces the scope for service competition and innovation which reduces demand for the fibre-based services, limiting the overall size of the market and payback for the investor/s. This scenario is therefore only more profitable compared with the non-discriminatory model if the swap/co-investment partners can secure competitive benefits in the retail market enabling them to raise prices, but that model further restricts demand and is unlikely to support investment on any geographically or socioeconomically widespread basis.

Furthermore, favouring a two operator model through the regulatory regime is simply likely to entrench the advantages (cashflows, market shares) enjoyed by the initial two operators further disadvantaging rivals and making it even less likely that an effectively competitive and balanced market outcome with investment by all players in the market can be achieved.

As regards the impact on multi-fibre, WIK's models show that regional multi-fibre arrangements (as distinct from building by building arrangements) only result in any significant level of competition when operators with relatively equal market shares in dense areas co-invest from the outset. Other multi-fibre scenarios tend economically to lock in duopoly or unsustainable competition.

It is also very important to consider the incentives for complementary competitive investment. Competitors face significant regulatory risks associated with the absolute reliance for the business case on fairly priced access. These risks can only be mitigated if competitors have a fair expectation is that any existing competitive problems will be addressed. A shift to 'predetermined' market analysis based on the choices of the dominant firm, creates very significant uncertainty which will inevitably undermine competitors' incentives to invest.

3.3.5 Does not benefit rural areas

It could be argued that jointly investing could be useful where capital is limited, especially in rural areas.

Benefits from investment sharing (pooling capital) are clearly not relevant for the scenario described in para 23 which only involves offering access (or swapping) and does not involve any sharing of investment in particular regions.

Investment sharing could be relevant for the co-investment scenario (para 24, annex III(1)). However, the business case in a sparse rural area is even more sensitive to the need to maximise demand amongst the few customers present. Co-investors are thus again more likely to make a return if they maximise the usage of the network with a fair non-discriminatory wholesale offer rather than seeking to make returns through limiting retail competition.

It is also important to recognise that the total investment requirements are not reduced through co-investment, but are even slightly increased in a multi-fibre case, although split amongst operators. The incremental costs of multi-fibre can be defrayed to deliver an effective multi-operator (4+) arrangement in dense areas splitting a large customer base across several players. However, in a rural area where cost control is particularly important, the inefficiencies – however limited – of operating parallel fibres and networks are likely to weigh against this type of arrangement. A single point to point network offering unbundling and bitstream whether funded by one or more operators (and/or supported by State Aid) with effective retail competition to drive demand is more likely to be economically efficient in a rural scenario.

3.3.6 Disincentivises achievement of multi-operator scenario

An important problem with allowing favourable regulatory treatment for two-operator deals is that it disincentivises dominant firms from deciding that fully competitive multi-operator arrangements are preferable. If the 'ideal' multi-operator scenario is ever to be achieved, there cannot be a midway house which benefits the dominant firm. The choice for a dominant firm must be between effective, predictable regulation that is likely to persist because bottlenecks resulting from high cost fibre roll-out are unlikely to be addressed after the fact, and an up-front agreement before major investments are made to do so in a collaborative manner which effectively relinquishes control by the dominant firm to a joint venture that is fully committed to enabling a competitive market. Any midway solution is liable to be preferred by dominant firms, but for all the reasons explained is likely to be deficient from both a competitive and investment perspective.

3.3.7 Requires NRA judgements with imperfect information

Whilst the duopoly 'access' arrangement (para 23) appears not to be associated with any specific further conditions other than that the access is 'equivalent', it could be argued that the co-investment duopoly arrangement (para 24) does come with strings attached – annex III(1).

Unfortunately, we suspect that these conditions may be very difficult to verify for NRAs and the courts – particularly whether the co-investors enjoy equivalent access or whether offering the same terms and conditions to others in the market would realistically be capable of being taken up by others. At least, with a standard market analysis, NRAs are assessing actual tangible characteristics such as market shares, prices and trends. Here, they are being asked to assess the 'fairness' of terms without having perfectly equal information of the underlying costs and business plan, and are invited to confirm unverifiable pre-judgements.

3.3.8 Overlaps with ‘term discounts’

Elsewhere in the draft NGA Recommendation - Annex I - the Commission discusses the potential for discounts to be given in exchange for an upfront volume commitment. These arrangements would be ‘tradable’. It is unclear to which extent the co-investment or access arrangements with one operator in article 23 and 24 differ in principle or in risk-reducing effect from arrangements where all operators may ‘invest’ in a long term contract with tradable rights.

The difference is that in the context of the long term contract the offer must clearly be made available to all and detailed conditions can be set by the regulator ensuring that such arrangements may only be made where they do not have discriminatory effect. It may be more compatible with the European Council conclusions and existing and draft/agreed EU Framework to focus on truly non-discriminatory conditions for discount commitments (including circumstances where such discounts may not be granted) than setting special rules for more specific, but exclusionary arrangements involving two or three players.

3.3.9 The two operator conditions are subject to interpretation and liable to result in fragmentation of regulatory approaches

Article 23 sets very few if any conditions enabling an SMP operator to benefit from regulatory relaxation. All that is required is the existence of multi-fibre (not specified how many lines) and the provision of ‘fully equivalent access’ (how defined?) to at least one independent provider (will any provider be acceptable?). In effect relaxed rules are being granted in a scenario that is open to extensive interpretation and misinterpretation – not least by dominant firms and the courts - and which appears to bear little relation to the competitive situation in the market. It is also not at all clear to us how this scenario delivers any risk diversification since there remains only one access network investor.

Arguably article 24 involves some sharing of investment and sets more conditions for the regulatory relaxation by requiring conditions in annex III(1) to be met including a requirement for the arrangement to be open to further parties. However, these also give rise to more questions and scope for interpretation than clarity.

Articles 23-24 and Annex III(1) all raise the following questions:

- How would regulators assess the adequacy of the terms of the arrangement and verify that access to the infrastructure was truly equivalent? Would the article 7 Task Force review the effectiveness of the contractual conditions/equivalence for the co-operative arrangement?
- For market analysis purposes, does the region in which there is a deal count as a separate geographic segment? What would be the minimum area for such a purpose? Would deals made in relation to specific buildings be covered? Or only over a reasonably significant geographic location?
- No cost-orientation would apply so presumably wholesale prices could/would already be set above cost. Could long term/short term pricing arrangements be available on top of the above-cost wholesale price? Would this not be equivalent to permitting a double risk premium?
- If a dominant firm does a deal with an operator in one area but invests alone outside this area (a very likely scenario), does that mean that it could offer different access charges in different areas regardless of underlying costs by virtue of the existence of the deal?

- Would accounting separation apply? What price would be 'imputed' to the downstream arm of the SMP operator in context of separated accounts? Would this be the price offered to others or some different internal cost-based price? Would this be geographically distinguished in case of a dominant operator with a deal in one area, but operating alone elsewhere?

In addition further questions arise specifically in relation to article 24 and III(1) concerning the nature of the co-investment and terms available to allow others to participate:

- How many multi-fibres need to be installed to qualify for the 'two operator' reward? At the moment this is not specified - so additional operators could be excluded from entering into the deal by virtue of lack of fibre availability. The Recommendation could specify a particular number of multi-fibres eg 4 but it is unclear what would happen if the co-investors wish to use 2 each (eg to offer TV on one and broadband on the other).
- What if (as is reasonably likely) the existing market shares and capital of competitors outside the deal makes it de facto uneconomic to join the co-operative arrangement or if economically the market will only support two co-investors - ie the openness of the deal to others is theoretical?
- Would each operator under article 24 be obliged to use a separate multi-fibre line for their services? Or is it sufficient for the co-investors to jointly 'deploy' multi-fibre (as suggested by the wording) and for each to offer retail services on the basis of unbundling? In this latter case, how would the competitive situation differ compared with a single dominant firm offering access to two commercially associated downstream divisions?
- What does joint deployment/co-investment mean? Could this be on the basis of an IRU to infrastructure owned by the SMP operator or does it mean a joint venture (joint ownership) or either?

We can only conclude that these two operator provisions create more room for uncertainty and interpretation than for clarity. This is further exacerbated by the fact that there is no practical case where these conditions have been assessed, nor indications of existing circumstances where the Commission would consider the tests were met.

3.3.10 'Safeguards' do not address concerns

The Commission has argued that the existence of 'multi-fibre' and margin squeeze tests address any competition concerns in this 'duopoly deal' scenario. For the reasons explained above, our concerns over the 'duopoly deal' approach involve issues of principle – such as non-discrimination – that are so fundamental that discussion of the details of how the scheme works is not really relevant. Nonetheless for completeness, we address the two primary proposals:

The existence of multi-fibre: most network roll-outs include some spare capacity and duplication and therefore could be characterised to some degree as involving 'multi-fibre'. This condition is therefore likely to be met in many cases. For example, in The Netherlands, FTTH is systematically (including fibre unbundling) based on two fibres, notably (but not exclusively to enable TV broadcast over fibre (not IPTV) alongside a set of services (including IPTV where demanded) over fibre. Unbundling is offered (and specifically regulated, including non-discrimination and cost-orientation) without specifying the use of the fibres. The existence of a given number of fibres however does not imply any specific consequences as regards competition. Whether or not there is competition depends on a number of other factors including the number of operators, market shares and trends, prices and innovation in the market. A competitive outcome could theoretically be reached as a result of a system based on multi-fibre,

but is dependent on so many factors that this outcome could never be presumed, and any such presumption would be incompatible with the existing and draft/agreed evolution of the EU regulatory framework. Factors influencing the objective market situation include the price of the multi-fibre, whether operators in the market have sufficient cashflow to 'buy in' to the arrangement and to what geographic extent, economic and absolute limitations on numbers of operators supported by the fibre, the behaviour of operators in the market, and the objective outcome of the market dynamics.

Margin squeeze tests: it is argued by the Commission that the presence of a margin squeeze test could ensure that competition in the market is preserved. Whilst we find margin squeeze tests invaluable and encourage the Commission to specify in more detail how margin squeeze tests should be applied, including in the context of service bundles and in a NGA context, we cannot see how this could be considered sufficient to ensure competition, warrant any prejudgement of effective competition in retail markets, or importantly to ensure certainty to enable investment by all parties. Firstly, whilst two NRAs (ComReg in Ireland and CMT in Spain) have specified margin squeeze rules in more depth, no EU Member State has relied on detailed margin squeeze tests alone to set access pricing. There is therefore no experience or proof of using this concept as a pricing rule replacement, and most NRAs have been particularly reluctant to conduct proper margin squeeze testing, notably because of fears of being overruled on appeal. Whilst ECTA explicitly supports (ex-ante) margin squeeze testing, including for bundles, realism is needed, as the Commission itself must recognise based on the large and increasing number of margin squeeze cases which have been assessed under competition law. More commonly, margin squeeze tests are used to cross-check consistency of pricing set on a cost plus or retail minus basis. This has been clearly acknowledged by the ERG itself, which has stated that *“with a cost-oriented access price, the problem of margin squeeze reduces to a problem of compliance with the access regulation at the wholesale level and/or to a potential predation at the retail level”* and that the *“Article 13 obligation”* is a *“prerequisite”* for a *price squeeze test*.⁵ Also, Article 13 of the Access Directive clearly states that, where – as in the case of vertically integrated incumbents – there is a risk of excessive wholesale pricing or application of a price squeeze, the remedy normally considered would be to impose price control and cost accounting obligations.

A number of specific additional problems in conducting a margin squeeze test in the context of NGA access products. Margin squeeze tests conducted in the context of (approved) discriminatory treatment for partner networks creates uncertainty since an 'efficient operator' may now be interpreted as either a partner operator (with scale) or another entrant (without scale). In addition, what products would or would not be included in the retail bundle has not been established since access is unlikely to be sold in isolation. Indeed, specifying a margin squeeze test without an objective price point for access or a pre-defined product set at the retail level looks almost impossible, suggesting that this is why it has never been done ex-ante.

Without clear rules – and especially the use of cost-based pricing – there is considerable uncertainty for all players in the market as to what the regulated price will be, undermining investment. The access owner, not knowing the access price in advance, may be unable to assess the business case for investing, whilst the competitive investor and access seeker must rely entirely on faith that the regulator will enforce case by case margin rules stringently, effectively and actively. Even strong regulators make mistakes. This is not a very clear or certain mechanism for a competitor on which to base a business which could be entirely undermined if access to customers becomes unavailable or unaffordable.

⁵ ERG, Revised ERG Common Position on the Approach to Appropriate Remedies in the ECNS Regulatory Framework, ERG (06) 33, pp. 74 and 101.

4. Ensuring the principle of non-discrimination

We note that whilst very significant attention has been given in the draft NGA Recommendation to several kinds of theoretically investment-supporting strategies, there has been very little discussion as to how regulators should ensure that the principle of non-discrimination is preserved even though this concept has been further emphasised in the European Council conclusions and in the draft/agreed revised EU Telecoms Framework.

Discrimination is a particularly serious issue (also reflected in competition law) when an operator has significant market power and this is exacerbated by vertical integration in the telecoms sector.

4.1 Non-price terms

We welcome the inclusion of an annex on 'equivalence' (annex II) which is retained from the first version of the draft Recommendation. However, this annex appears not to have been updated and applies only to 'civil engineering' and 'access to the terminating segment'.

If, as apparently accepted by the Commission, and now reinforced through the inclusion by the Council and Parliament of fibre unbundling in the draft/agreed EU Access Directive Annex II, fibre access should be a normal requirement in addition to duct access it seems unduly limiting to restrict the scope of the equivalence principle to ducts.

Many of the provisions such as ensuring equal access to information and equal technical conditions as well as equivalent provisioning, fault management systems and measurable SLAs have been recognised by the ERG as constituting best practice in the enforcement of access to other products such as unbundling and bitstream and would seem to be a normal application of the remedy of 'non-discrimination' as it applies to non-price terms.

The requirement to publish information about infrastructure and network elements is also directly referenced in the draft/agreed Annex II (Access Directive) which applies not just to ducts and 'terminating segments' but also to unbundled fibre.

Furthermore the upgrade of traditional networks to NGA provides a ready-made opportunity to ensure that new systems installed are designed from the outset so as to create a level playing field.

We strongly recommend that the principle of equivalence as described in Annex II of the draft Recommendation should apply to any product which is considered to be an enduring bottleneck including remedies in market 4 and in market 5 particularly where vDSL and PON architectures have been installed.

Equivalence enforced in accordance with Annex II should also be a pre-requisite for any operator-specific discount arrangements, whilst equivalence of input (which is not required by the Commission annex as currently drafted) should be introduced for any new network upgrade/development so that networks and systems are competition ready from the outset.

4.2 Price discrimination/margin squeeze

We welcome the significant attention that has been given to margin squeeze tests in the draft NGA Recommendation. We consider these to be an important complement (not replacement) for clear pricing rules to ensure that prices are appropriately set to enable competitors to make a fair margin.

However, there is very little evidence that ex ante margin squeeze tests have been or can readily be specified and enforced effectively by NRAs. Ex post margin squeeze cases initiated by DG Competition relating to cases in France, Germany, Spain, Poland and Slovakia effectively signal how difficult such issues have been to address through the ex ante framework, and how long these cases take to run their course.

To prepare the ground for a more effective application of margin squeeze testing, it would be helpful if the Commission could add an annex setting out the primary procedures and principles required when conducting a margin squeeze test.

Key methodological principles include:

- Margin to reflect costs of reasonably efficient competitor (lacking incumbent scale economies and not distorted by selective partner network deals)
- “Period by period” methodology to be preferred to NPV (Net Present Value).
- For bundles: the imputation test should be carried out on each service included in the bundle. The bundled price may be equal or lower than the price for single services, provided there are efficiencies:
 - at wholesale level (but they have to be translated on the wholesale costs applied to competitors);
 - at retail level - e.g. because of savings at the distribution level (but the relevant efficiencies should be such that competitors can also achieve them)
- For promotions: Each promotion should be assessed on its merits – no compensation between negative and positive margin promotions should be allowed.

Key procedural requirements include:

- Margin squeeze test must be specified ex ante by the regulator.
- Retail offers, bundles and promoted products must be notified by the SMP operator to the regulator prior to launch with the onus on the SMP operator to prove there is sufficient margin through replicability/imputation tests.
- If the margin is insufficient, the wholesale price will be decreased or the SMP operator may voluntarily raise the retail price
- Discounts and promotions must be included in margin squeeze tests and subject to the prior approval of the regulator. Promotions should be reflected in wholesale price.

5. The impact of multi-fibre

It is clear from the Commission’s proposals that significant attention has been given to promoting multi-fibre as a pro-competitive architecture. We agree that multi-fibre can have advantages, but it is important not to draw conclusions about the competitive outcomes in the market on the basis of the existence of an architecture alone absent an analysis of the resulting conditions in the market, particularly when the associated pricing approach is so different from that understood through the unbundling model

The fact that an SMP operator rolls out multi-fibre does not reduce that operator’s incentives to discriminate in the terms on which it offers access to the multi-fibre. Moreover, importantly even absent any discrimination, new analysis by WIK shows that the theoretical competitive potential of multi-fibre when offered on a regional ‘co-investment’ basis is limited to certain situations – particularly co-investment between multiple firms with similar penetration prospects in dense areas where multi-fibre is available from the MPoP. In other situations multi-fibre raises costs by between 10-20% and results in duopoly or unsustainable competition – where one of the co-investors would fail to achieve a sustainable business.

In this context, it is important not to jump to conclusions about the properties of multi-fibre. Instead, the Recommendation should facilitate multi-fibre as an option for competitors whilst ensuring that other remedies are made available along the value chain (including fibre unbundling and bitstream) unless effective competition is found in a relevant market – based on an assessment based on the applicable (current or draft/agreed) regulatory framework and whether resulting from multi-fibre or otherwise.

The two areas where multi-fibre may be supported in the Recommendation are:

- Market 4: the addition to the reference offer of SMP operators of the possibility for an entrant to order multi-fibre installation for specific buildings/areas on cost-based rates set by the NRA; additionally multi-fibre in the terminating segment could be offered on request as a facility sharing obligation on all operators under national legislation.
- Multi-operator co-operative arrangements: the potential for multi-fibre to increase the competitive possibilities amongst co-investors in dense areas alongside other conditions described above, without prejudice to conducting a full market analysis based on the facts.

6. The ladder of investment

We clearly explained in our previous consultation response on Next Generation Access our support for the principle of the ladder of investment in which several products are made available simultaneously. This is crucial to ensuring that the market (and not the regulator) can make efficient buy/build decisions.

In this context we strongly support the Commission's proposals that regulators should examine markets 4 and 5 concurrently. It is important to note that we do not necessarily see the ladder as a scheme whereby a competitor will always be expected to 'climb' to the next rung, but where they will climb the ladder where it makes economic sense to do so, and will rely on different products in different circumstances and different regions in order to offer a comprehensive nationwide service to consumers.

The ladder principle today also supports the business cases of different types of operators, some of which – such as business providers (discussed below) – may not be able to pursue a ubiquitous scale strategy that would ever result in them being able to climb the ladder outside certain regions or countries. Furthermore retaining rungs on the ladder can be important in reducing entry barriers to maintain competition.

Within the context of the ladder, we therefore support separate examination of different business models (especially business and residential) and the principle – emphasised at length in our response – that deregulation of any rung of the ladder in any region should only be justified if actual effective competition is found including in the provision of wholesale services and based on an assessment of the existing conditions including forward-looking trends in the market and not hypothetical expectations. Our view is generally in line with the guidance issued in article 7 letters by the Commission eg for markets 5 in the UK, Spain and Finland.

In this context, paragraph 41 should be amended so as to ensure that the expectation of effective competition in the downstream market resulting from fibre unbundling is based on evidence (ie that the market downstream of copper unbundling is competitive) and that the market downstream of the locations of the interconnection points for fibre unbundling (if these are different from the copper connection points) is effectively competitive. It is also crucial to ensure a separate examination of the business market in this context.

7. Addressing business and residential needs separately

An important issue which is only partially addressed in the draft NGA Recommendation is the use of NGA products for the provision of business services – primarily business-grade bitstream access (also relevant for public administrations). The draft NGA Recommendation does recognise that products should be offered which meet the needs of businesses (and should mention the needs of administrations), but fails to explain how this is to be addressed within the market analysis process. The draft Recommendation's discussion of the co-investment scenarios in which regulation can be completely lifted also fails to take account of the specific features of business service provision, even if it did address 'mass-market' provision.

Communications provision to large businesses and administrations typically involves very different demand and supply conditions from that applying to consumers and small businesses. Major multi-site and multi-national corporate/administrations typically request services to be provided to dispersed sites across a wide geographic and often multi-national area.

For example, a bank might need to connect their head office with branches, ATMs, homeworkers and servers for the e-commerce website. The geographic scope of the demand is therefore usually nationwide or multi-national and the service providers serving these customers require a similarly wide geographic reach. As a result of these geographic needs and the very specific and advanced service requirements of large corporate/administrations, business service providers have tended to become specialised in their field.

These providers are large in scale on a European or global basis but typically spread thinly across many countries with limited scale in any single country and with specific access requirements to enable them to offer seamless advanced service provision to sophisticated customers.

Suggesting the provision of business-grade products alone does not address the geographic reach or low-scale issues that these providers face. In particular, if geographic segmentation or deregulation occurs on the basis of mass-market competition, if term discounts are offered for specific volumes, other volume-related discounts apply, or if a multi-operator deal is approved, this would very rarely take into consideration the needs of service providers focusing on the needs of businesses and administrations. Yet the contribution of these providers to boosting the productivity of European industry and in enabling effective government is significant. Arguably facilitating effective such communications is even more important to reaching the Lisbon growth and jobs goals than boosting consumer take-up of broadband.

The NGA Recommendation should request that NRAs examine the specific supply and demand conditions for providers of business-grade services within the market analysis process and if necessary segment the market and associated geographic, product and pricing conditions.

Subsequently, we encourage the newly appointed Commission to launch a wider exercise to complete the single market in telecoms and address the needs of major corporates and administrations for seamless communications services within and across EU Member States.

Equally the product and geographic needs of mass-market suppliers could usefully be considered separately from business within market 5 – focusing in particular on multi-cast capability and the location of hand-over points at or close to the MDF at which copper unbundling is/was made available.

8. Migration and transition issues

8.1 Network migration processes and conditions

We welcome the clarifications given in relation to migration and transition issues; in particular that parallel running should be required over a period unless an agreement is reached with competitors for a shorter transition or fully equivalent access is granted at the same location. However, specifying a '5 year' period for parallel operation may not sufficiently provide for payback in member states (in particular new member states) where unbundling investments have only just been made.

The important principle for these countries – and indeed all others – is that the **migration procedure should ensure that competitors can maintain services to customers and should not strand competitors' assets or should otherwise fully compensate for any stranding of assets**. The assets which need to be covered may not simply be restricted to the exchange but may, depending on the architectural developments, go beyond that. If there are no broad guarantees of this principle, any further investment in deepening competitors' core network infrastructure and other investments associated with unbundling will inevitably be chilled as happened during the lengthy negotiation process in the Dutch market. Consumers may also become wary of the service implications for signing up to a competitor's offering. In this context a guideline minimum of 5 years of parallel running can be given but subject to this further – more overarching condition to provide guarantees against stranded assets – being met.

In addition it is important to indicate when the 5 year period will begin to avoid a strategy by incumbents to announce false closures to chill LLU investment. It should therefore be **clarified that the 5 year period should be triggered only once the SMP operator can demonstrate that NGA deployment is actively in process**.

A further concern relates to the quality of LLU, which may deteriorate if not guarded from interference against vDSL and the operational conditions. **The Recommendation should therefore advise that existing access obligations on market 4 and 5 should not deteriorate in terms of quality or economic competitiveness until cost effective NGA wholesale access products and a fully functioning and transparent migration process are in place**.

Furthermore, the Recommendation should **acknowledge the different role played in the transitory phase by NGA bitstream products**. Such services, during the transitory period, will be fundamental to warrant sustainable competition at retail level on new services and allow for a progressive migration of customer onto the new network as the copper network is progressively dismantled. In many cases, an FTTx unbundling offer (if not available at the ODF), wholesale offer for terminating segments and access to ducts and civil engineering will not play a relevant role during early years of NGA roll out due to the relevance of operative complexities and information asymmetry as well as reduced scale economies.

We also feel that the **obligation of transparency regarding the incumbent's obligations to give timely information needs to be strengthened considerably and accompanied by a requirement to consult and co-operate** given that architectural changes for NGA impact the entire industry and particularly interconnected operators and not just one firm.

9 Pricing and costing

9.1 Risk premium

The draft Recommendation implies that FTTH is always risky whilst vDSL is substantially less risky. It then draws conclusions on this basis about the allowable risk adjusted return. Whilst we agree on average that FTTH is likely to be more risky than vDSL, it may be more appropriate for the Recommendation to harmonise the methodologies for assessing risk rather than drawing technology-specific conclusions.

Quantitative analysis by WIK suggests that risk has a geographic aspect becoming increasingly risky in less populated areas. For example WIK finds that in Germany, vDSL would be profitable for a dominant firm transferring its existing wholesale and retail customer base without raising prices to 71.5% of households. Meanwhile FTTH PON would be profitable under the same conditions to 25% households. These results vary significantly between countries (especially for FTTH). The degree of riskiness therefore depends to a large extent on national circumstances, the specific geographic roll-out plan of the SMP operator and the extent to which prices are averaged between risky and less risky areas.

9.2 Transitional costing issues

A further issue associated with transition is how the costs of parallel running are treated. It is important firstly for regulators to ensure that forward looking business plans for copper and fibre networks when run in parallel are consistent to prevent double counting of penetration effects. For example, pricing proposals which suggest low penetration expectations for NGA (hence greater risk) cannot be accompanied by assumptions that demand (including self-supply) for unbundling and bitstream will reduce significantly.

In addition, costs should be allocated fairly and consistently amongst the various wholesale and retail products so as to avoid double counting.

Where copper is expected to be phased out, that would also tend to reduce its value to purchasers and even where no announcements have been made, the uncertainty created through lack of information about when upgrades are planned to take place is significantly impacting demand for copper loops. It is particularly important at this time that regulators assess the costs of copper rigorously ensuring that asset lives are appropriately set and the cost of capital is not excessive on this legacy 'utility' asset to avoid over-recovery. Ensuring that there is no excessive return in the pricing of copper above cost is important in ensuring the right incentives for SMP operators to upgrade the networks to make potentially higher returns through fibre.

Further attention on this issue by the ERG and Commission would be welcome.