



Report for MTC

Independent assessment of the market analysis process in Namibia

27 April 2012

Omar Bouhali, Stéphane Piot

Ref: 34737-166

Contents

1	Introduction	1
1.1	Context and structure of the report	1
1.2	About Analysys Mason	1
2	Summary of our understanding of the market analysis process in Namibia	4
2.1	Definition of the relevant markets and analysis process	4
2.2	Selection of relevant remedies	5
2.3	Conclusion on the market analysis process in Namibia	8
3	Description of the market analysis process in other jurisdictions	10
3.1	European Union	10
3.2	Africa: SADC and other selected African countries	20
3.3	Conclusion on the market analysis process in other jurisdictions	28
4	Conclusions and comments on the market analysis process in Namibia	30

Confidentiality Notice: This document and the information contained herein are strictly private and confidential, and are solely for the use of MTC and CRAN.

Copyright © 2012. The information contained herein is the property of Analysys Mason and is provided on condition that it will not be reproduced, copied, lent or disclosed, directly or indirectly, nor used for any purpose other than that for which it was specifically furnished.

Analysys Mason
66 avenue des Champs Elysées
75008 Paris
France
Tel: +33 (0)1 72 71 96 96
Fax: +33 (0)1 72 71 96 97
paris@analysysmason.com
www.analysysmason.com

Registered as Analysys Limited: 410 406 839 RCS Paris
Subsidiary of Analysys Limited, registered in England No. 1819989
St Giles Court, 24 Castle Street, Cambridge, CB3 0AJ, UK

1 Introduction

1.1 Context and structure of the report

The Communications Act, 2009 (Act No.8, 2009, referred to as “the 2009 Act” in the remainder of the report) establishes the general framework governing the opening of the Namibian telecommunications sector to competition. In particular, the 2009 Act defines:

- The Communications Regulatory Authority of Namibia (CRAN) as the independent regulator of the communications industry in Namibia.
- The conditions under which CRAN should determine which operators hold a dominant position in the market.
- A set of duties for operators, some of which differ depending on whether the operator has been declared dominant in the relevant market or not.

On 20 March 2012, CRAN published in the Government Gazette of the Republic of Namibia (No. 4905) a General Notice (No. 62, 2012) related to Section 78 of the 2009 Act, i.e. about the determination of dominant positions in the market (hereafter referred to as “the Notice”). In the Notice, CRAN stated its intention to consider only two relevant markets (the telecoms and broadcasting markets) and to set the market share threshold for dominance at 35% of revenues. CRAN estimated that, given the framework defined by the 2009 Act, this would lead to a situation where MTC, Telecom Namibia and Leo would all be considered dominant in the telecoms market. CRAN invited comments to be presented before and during a hearing that CRAN will hold to determine dominance.

In this context, MTC has appointed Analysys Mason to prepare an independent contribution to CRAN’s Notice. The remainder of this document presents our contribution and is laid out as follows:

- Section 2 summarises our understanding of the market analysis process in Namibia
- Section 3 describes the market analysis process in other jurisdictions
- Section 4 presents our conclusions about the market analysis process in Namibia.

1.2 About Analysys Mason

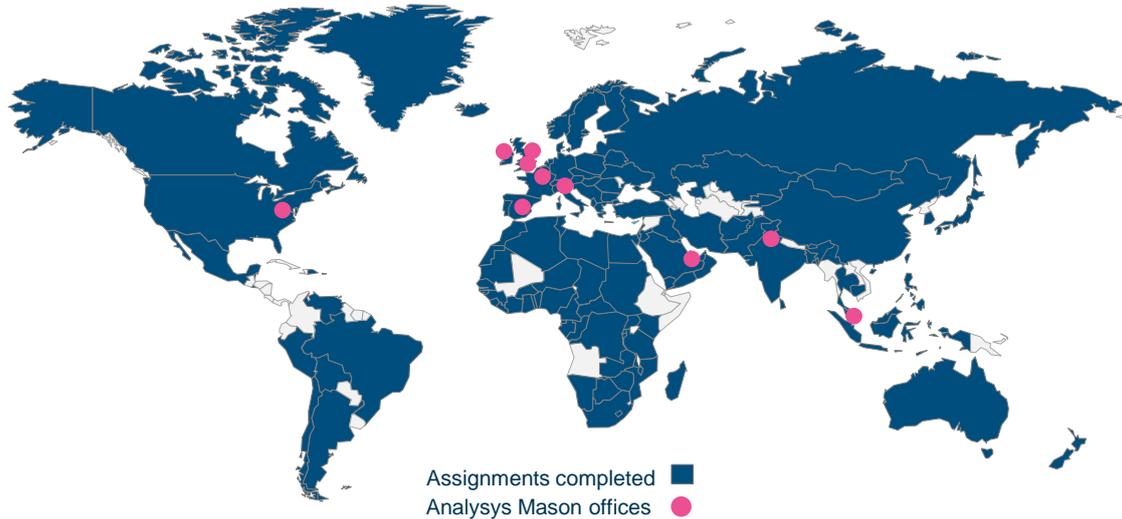
Analysys Mason is a trusted adviser on telecoms, technology and media. We work with our clients, including operators, regulators and end users, to:

- design winning strategies that deliver measurable results
- make informed decisions based on market intelligence and analytical rigour
- develop innovative propositions to gain competitive advantage

- implement operational solutions to improve business efficiency.

With over 230 staff in 12 offices, we are respected worldwide for our exceptional quality of work, independence and flexibility in responding to client needs. For 25 years we have been helping clients in more than 100 countries to maximise their opportunities.

Figure 1.1: Analysys Masons' s global presence and experience [Source: Analysys Mason, 2012]

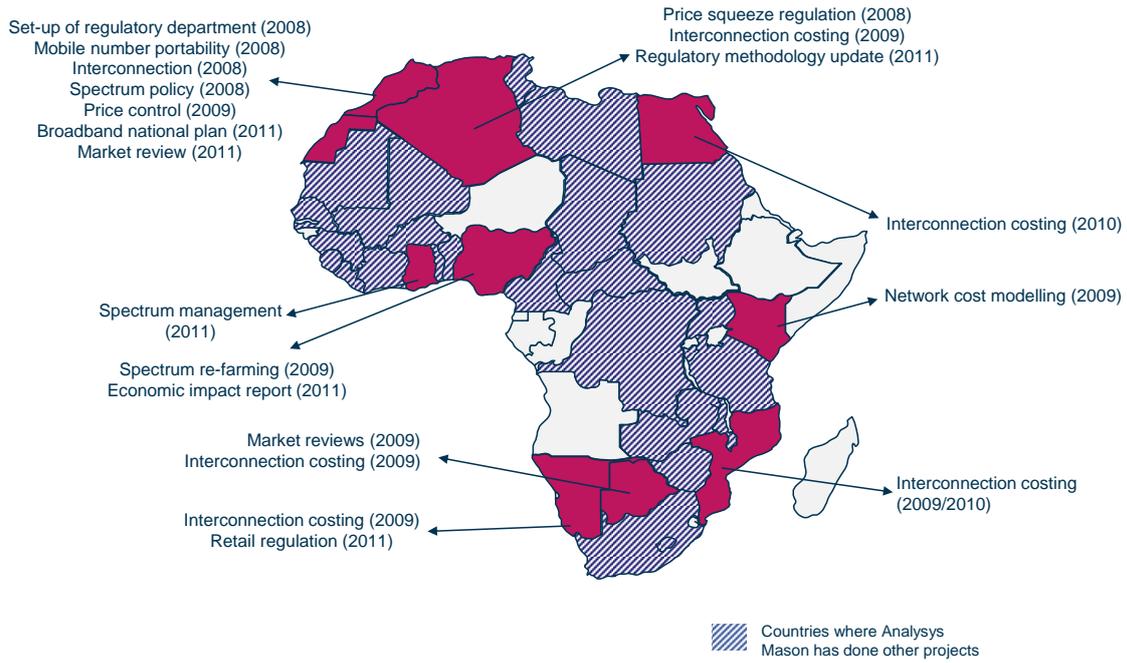


We are highly experienced in conducting market analyses in line with the European Regulatory Framework, and have completed over 40 projects in the EU, covering all markets identified by the European Commission in its 2003 and 2007 Recommendations. We regularly work for operators and regulators in Europe and worldwide on specific market analysis issues, and have assisted the EC with its review of the European Regulatory Framework.

We also have a strong experience in supporting regulatory authorities and operators, in Africa, the Middle-East, Asia and Central America, to define relevant markets, assess the level of competition and design appropriate regulatory intervention. A selection of our experience in market analysis is provided in Annex A.

Analysys Mason has extensive experience of supporting telecoms players throughout Africa, including fixed and mobile operators, investors and lenders, and regulatory authorities. During the last three years, we have conducted over 100 projects in Africa. Figure 1.2 below presents the main regulatory projects we have undertaken in Africa since 2004.

Figure 1.2: Regulatory support assignments in Africa, 2008–11 [Source: Analysys Mason, 2012]

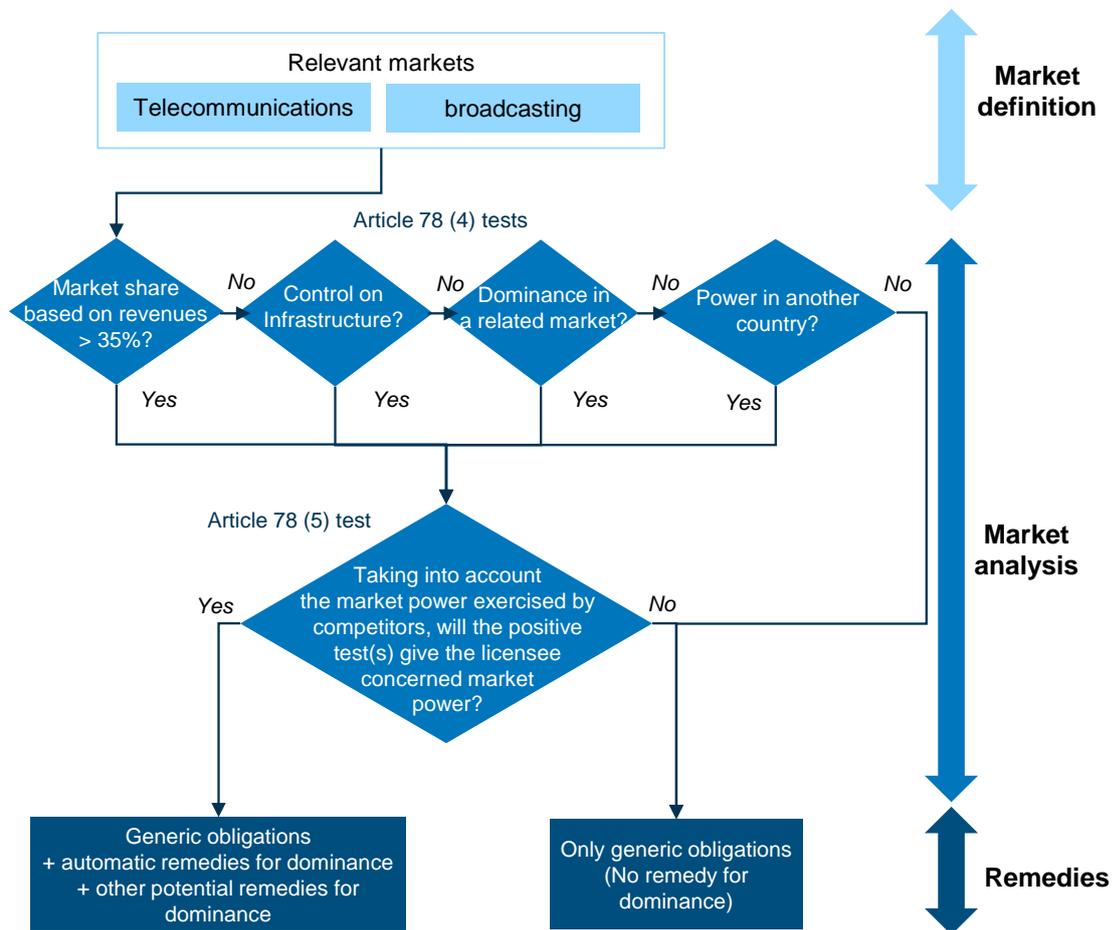


2 Summary of our understanding of the market analysis process in Namibia

In this section, we present our understanding of the market analysis process defined in the 2009 Act and in the Notice. We first present the market definition and analysis process, followed by a selection of relevant remedies.

Figure 2.1 below presents a synthesis of the market analysis process, as defined in the 2009 Act and in the Notice.

Figure 2.1: Market analysis process presented in the Notice [Source: Government Gazette of Namibia, Analysys Mason, 2012]



2.1 Definition of the relevant markets and analysis process

► Market definition

In many countries the process starts with a definition of the relevant markets. In its Notice, CRAN considers five potential approaches to defining relevant markets:

- Approach 1: “service and technological neutral market definition”
- Approach 2: “technology neutrality”
- Approach 3: “service and technology neutrality but differentiated by distribution channel”
- Approach 4: “demand-side and supply-side substitutability”
- Approach 5: “based on licence categories.

Based on a comparison of the ability of these approaches to implement the objectives of the 2009 Act and of the regulatory burden on operators and CRAN, CRAN recommends using the “service-neutral and technology-neutral market definition” approach, where only two relevant markets are defined: telecommunications services and broadcasting services.

► *Market analysis*

In each of these two relevant markets, the framework of the analysis process is set by Section 78(4) of the 2009 Act, which CRAN refines in the Notice by defining a threshold of 35% of market revenues (whereas the 2009 Act did not specify any threshold), and Section 78(5) of the 2009 Act. CRAN therefore aims to conduct a two-step analysis:

- If an operator meets at least one of the following criteria, it is considered dominant under Section 78(4) of the 2009 Act:
 - holds at least 35% market share based on revenues;
 - controls some infrastructure that is necessary for the provision of the services in question;
 - has dominance in a related market that would allow it to exercise power in the relevant market; or
 - has a position in a market in another country or a relationship with providers in another country that can be used to exercise market power in respect of the relevant market in Namibia.
- For each operator found dominant under Section 78(4) of the 2009 Act, Section 78(5) of the 2009 Act requires CRAN to assess whether, taking into account the market power exercised by its competitors, the dominant operator still holds “concerned market power”. Such an assessment therefore implies a test but we note that the Notice does not provide any additional detail about how CRAN intends to implement the test implicitly required by Section 78(5) of the 2009 Act.

2.2 Selection of relevant remedies

In addition to the generic obligations described in the 2009 Act (which apply to all operators), operators declared dominant based on the tests described in Section 78(4) and Section 78(5) of the 2009 Act will be imposed additional remedies. These additional remedies can be classified into the following two categories, which are detailed in the rest of this section:

- remedies automatically applicable because of the operator’s dominant position

- other potential remedies that CRAN can impose on dominant operators.

2.2.1 Remedies automatically applicable because of the operator's dominant position

The 2009 Act sets out a number of remedies automatically applicable to dominant market players, as illustrated in Figure 2.2 below.

Figure 2.2: Remedies automatically applicable because of dominance [Source: 2009 Act, Analysys Mason, 2012]

Section	Subject	Detailed remedy
33(2)	Anti-competitive practices	Prohibition of abuse of individual or collective dominant position.
48(2) (a)	Unbundled access to network elements	<p>Non-discriminatory access to network elements¹ on an unbundled basis at any technically feasible point under the condition that:</p> <ul style="list-style-type: none"> • it does not place an unreasonable burden upon the dominant carrier; and • it will place an unreasonable burden upon the carrier requesting such elements if access is not granted. <p>Rates, terms and conditions that are just, reasonable and non discriminatory for this access.</p>
48(2) (b)	Co-location of equipment	<p>Physical co-location of equipment necessary for interconnection or access to unbundled network elements. Rates, terms and conditions that are just, reasonable, and non discriminatory for this physical co-location.</p> <p>The dominant carrier may provide for virtual or any other form of co-location if it demonstrates to CRAN that physical co-location is not practical for technical reasons or because of space limitations.</p>
49(8)	Interconnection	<p>Interconnection at any technically feasible point within the dominant operator's network.</p> <p>Such interconnection must be accomplished without unreasonable interruption of service to existing users.</p>
50(1)	Sharing of infrastructure	<p>Obligation to lease any infrastructure to any other carrier and to allow the latter carrier to install telecommunications equipment on such infrastructure or to otherwise use such infrastructure.</p> <p>Additional details are included in the 2009 Act but no definition of "infrastructure" is provided whereas this term is very imprecise and, can lead to many different obligations (local loop or fibre unbundling, duct or dark fibre access, voice interconnection...).</p>
51(2) (3)	Prohibition against restraint of resale	<p>Obligation to resell at a discounted rate to any reseller.</p> <p>Where the parties are unable to negotiate a discounted rate for resale, the parties may request the Authority to convene a hearing to determine such resale discount rate.</p>

¹ The 2009 Act defines "network elements" in Section 48 as "a facility or equipment used in the provision of a telecommunications service, including all features, functions and capabilities that are provided by means of such facility or equipment, such as subscriber numbers, databases, signalling systems and information sufficient for billing and collection or used in the transmission, routing or other provision of telecommunications services".

Section	Subject	Detailed remedy
54(1) (5) (7)	Separated accounts and transparency	<p>Obligation to keep separate accounts for telecommunications activities, to the extent that would be required if the telecommunications activities in question were carried out by legally independent companies, so as to identify all elements of costs and revenue, with the basis of their calculation and the detailed attribution methods used.</p> <p>Obligation to follow and implement accounting procedures that the Authority prescribes and to provide financial information to the Authority promptly on request and at the level of detail required by the Authority.</p> <p>Obligation for discount schemes to be fully transparent and non discriminatory.</p>

2.2.2 Other potential remedies that CRAN can impose on dominant operators

Section 38 (11) of the 2009 Act states that the Authority may impose specific obligations on a licensee when the licensee has a dominant position in relation to the provision of any class of telecommunications services. Such other potential remedies are presented in Figure 2.3 below.

Figure 2.3: Additional remedies that CRAN can impose on dominant operators [Source: 2009 Act, Analysys Mason, 2012]

Section	Subject	Detailed remedy
44(2)	Provision of telecommunications equipment	The Authority may restrict the provision of telecommunications equipment by a licensee that is dominant in a market relating to the use or provision of such equipment by prescribing such accounting rules and other regulatory safeguards as it may consider necessary for the promotion of competition, after having followed a rule-making procedure.
54(8)	Control of discount schemes	Where a licensee has the obligation to comply with cost accounting procedures, the Authority may require discount schemes for users, including customers, to be modified or withdrawn if they are prejudicial to the objects of this Act.

2.3 Conclusion on the market analysis process in Namibia

In this section, we draw conclusions on the main points that characterise the market analysis process in Namibia.

Regarding market definition

The relevant markets that CRAN intends to define are very wide: the overall telecommunications market on one side and the broadcasting market on the other. The rationale behind such a market definition is based on the use of a “service and technological neutral market definition” approach (Approach 1 of the Notice). The other approaches considered by CRAN are:

- a “technology neutrality” approach (Approach 2 of the Notice) leading to a separation between “voice services”, “data services” and “broadcasting services”
- a “service and technology neutrality but differentiated by distribution channel” approach (Approach 3 of the Notice), leading to a separation between “wholesale services” and “retail services”
- “demand-side and supply-side substitutability” approach, (Approach 4 of the Notice) that enables to regulate segments separately
- an approach “based on licence categories” (Approach 5 of the Notice), leading to a separation between “ECNS” and “ECS” for telecommunications services, and “BC” and “Signal distribution” for broadcasting services.

We understand that CRAN “service and technological neutral market definition” suggested approach has been used in comparison to other approaches considered in order to:

- Minimise the regulatory burden for the operators and CRAN
- Be suited to a converged ICT sector based on a technology- and service-neutral regulation.

Regarding market analysis

In Section 78(4) of the 2009 Act, four independent criteria have been defined that allow CRAN to establish whether an operator holds a dominant position:

- Market share, such that the operator is able to act independently of its competitors. CRAN intends to use a threshold of 35% in revenues for this criterion
- Operator controls some infrastructure that is necessary for the provision of the services in question;
- Operator has dominance in a related market that would allow it to exercise power in the relevant market in question; or
- Operator has a position in a market in another country or a relationship with providers in another country that can be used to exercise market

power in respect of the relevant market in Namibia.

As specified in Section 78(5) of the 2009 Act, the market power of competitors should also be taken into account. We note that the Notice does not provide any additional detail about how CRAN intends to implement this test and we believe that this missing element, which is a key step in market analyses, should be fully detailed.

Regarding remedies

The 2009 Act describes a broad list of remedies that are automatically applicable to “dominant operators”:

- Prohibition of abuse of individual or collective dominant position
- Unbundled access to network elements
- Co-location of equipment
- Interconnection at any technically feasible point within the dominant operator’s network
- Sharing of infrastructure
- Prohibition against restraint of resale
- Separated accounts and transparency.

Some additional remedies can also be imposed at the “discretion” of CRAN:

- Restriction of the provision of telecommunications equipment
- Control of discount schemes.

We note that no details are provided on the way CRAN plans to refine the broad list of automatically applicable remedies and select appropriately relevant additional remedies.

3 Description of the market analysis process in other jurisdictions

In this section, we present the market analysis process used in other jurisdictions in order to analyse the elements that may be relevant for Namibia.

We first present the European Union (EU) framework, which is often recognised as a “best practice” especially for the market analysis process it establishes.

We then study relevant practices in selected African countries:

- SADC² countries which have conducted a market analysis or a “similar process”. Among the 14 SADC countries, our research shows that 9 countries (Angola, Democratic Republic of the Congo, Lesotho, Malawi, Mauritius, Mozambique, Seychelles, Swaziland and Zimbabwe) have not conducted any market analysis. We therefore present the relevant situation in the four countries which, in addition to Namibia, have conducted a market analysis: Botswana, South Africa, Tanzania and Zambia.
- In order to provide a more complete view of practices in the benchmark African jurisdictions, we have added Kenya and Morocco, which have also conducted a market analysis in recent years.

3.1 European Union

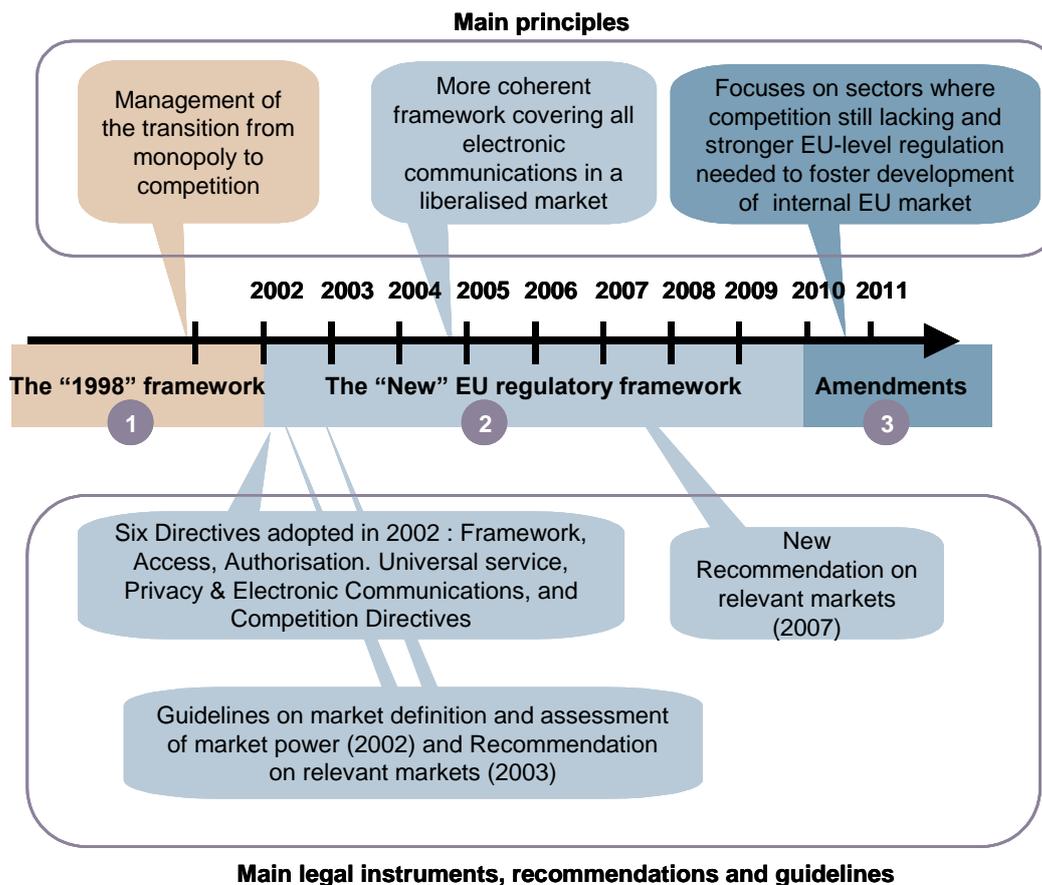
In this section, we present the regulatory framework of the European Union, the market definitions and analysis process, as well as the principles for selecting remedies and the remedies imposed on dominant operators.

Regulatory framework

The European Regulatory Framework has gone through three main stages of evolution, as illustrated in Figure 3.1 below.

² Southern African Development Community

Figure 3.1: Three main evolutions of the EU Regulatory Framework [Source: Analysys Mason, 2012]



The first stage of regulation was put in place in 1998 to manage the transition of the telecommunications sector from monopoly to competition, and accompany the liberalisation of the European telecoms markets. This stage included significant asymmetric regulation imposed on the incumbent operators.

The second stage of evolution started in 2002, with the so called ‘New EU Regulatory Framework’ which aimed to create a more coherent and harmonised framework covering the regulation of electronic communications in a liberalised market. In particular, this framework introduced the process of market analyses to determine appropriate regulatory obligations for dominant operators (see next section). The EU framework consisted of the following six ‘Directives’, which had to be transposed by EU Member States in their national laws:

- Framework Directive (2002/21/EC)
- Access and Interconnection Directive (2002/19/EC)
- Authorisation Directive (2002/20/EC)
- Universal Service Directive (2002/22/EC)
- Privacy in Electronic Communications Directive (97/66/EC)
- Competition Directive (2002/77/EC).

The main characteristics of the New Regulatory Framework (in comparison with the 1998 framework) are summarised below.

Figure 3.2: Main criteria of the 2002 regulatory framework [Source: European Commission, Analysys Mason, 2012]

Main characteristic	Implementation
Technology-neutral	Definition and regulation of “electronic communication services” and “electronic communication networks” on a technology-neutral basis. The old framework was “technology-oriented”.
Simplified framework	Six Directives, compared to 26 under the previous framework.
General authorisation	Use of general authorisation. Under the previous framework, different types of individual licences with non-homogeneous conditions in different EU countries were used.
Alignment with competition law principles	Use of the same methodologies as in competition law principles in the context of ex-ante regulation, i.e. market analysis procedure (market definition, market analysis and definition of regulatory obligations). Alignment of the definition of dominant operator with the notion of dominance used in competition law (“power to behave to an appreciable extent independently of competitors, customers and ultimately consumers”). Under the previous framework, operators with more than 25% market share (in a “broadly” defined market) were considered as dominant.
Selection of justified and proportionate regulatory obligations	Definition of a range of regulatory obligations from which regulators need to select those that are justified and proportionate to the market failures identified. Lightest and least intrusive remedies should be favoured. Retail regulation should only be imposed where wholesale or related measures would fail to achieve the objective of ensuring effective competition.

In 2002 and 2003, the EU directives were also completed by:

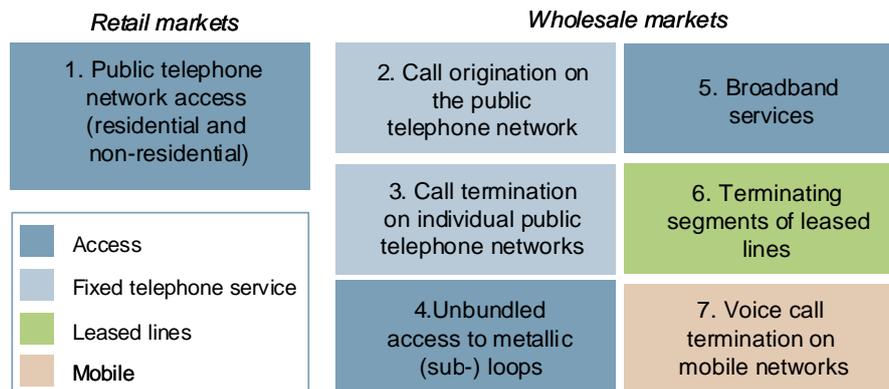
- The *Guidelines on market definition and assessment of market power* (2002), which defined how the process of market analysis and regulatory obligations should in practice be applied by national regulators.³
- The *Recommendation on relevant markets* (2003), which listed 18 relevant markets susceptible to ex-ante regulation, and which therefore constituted the minimum list of markets that needed to be analysed by regulators.

In 2007, a new recommendation regarding relevant markets defined a new list of relevant markets susceptible to ex-ante regulation. This 2007 Recommendation listed seven markets (one retail market and six wholesale markets) instead of the 18 markets specified in the

³ Criteria to establish dominant position typically include: large market share (e.g. typically above 40%), overall size of the undertaking, control of infrastructure not easily duplicated, technological advantages or superiority, absence of or low countervailing buying power, easy or privileged access to capital markets/financial resources, product/services diversification (e.g. bundled products or services), economies of scale, economies of scope, vertical integration, a highly developed distribution and sales network, absence of potential competition and barriers to expansion.

2003 Recommendation. The new emphasis on wholesale markets reflected the Commission's view that regulatory controls on retail services should only be imposed where relevant wholesale measures, or measures regarding carrier selection or pre-selection, would fail to achieve the objective of ensuring effective competition and the fulfilment of public interest objectives. The seven markets are illustrated in Figure 3.3.

Figure 3.3: The seven markets of the 2007 EC recommendation [Source: European Commission, Analysys Mason, 2012]



Finally, the third stage of evolution happened in 2009 with an amendment to the European framework consisting of:

- two new Directives updating four existing Directives
- a new regulation establishing the Body of European Regulators for Electronic Communications (BEREC) in replacement of the European Regulatory Group (ERG).

The 2009 amendments had no impact on the market analysis process (i.e. the 2003 *guidelines on market definition and assessment of market power* still apply nowadays).

Market definitions and analyses

Figure 3.4 illustrates the EU market analysis process.

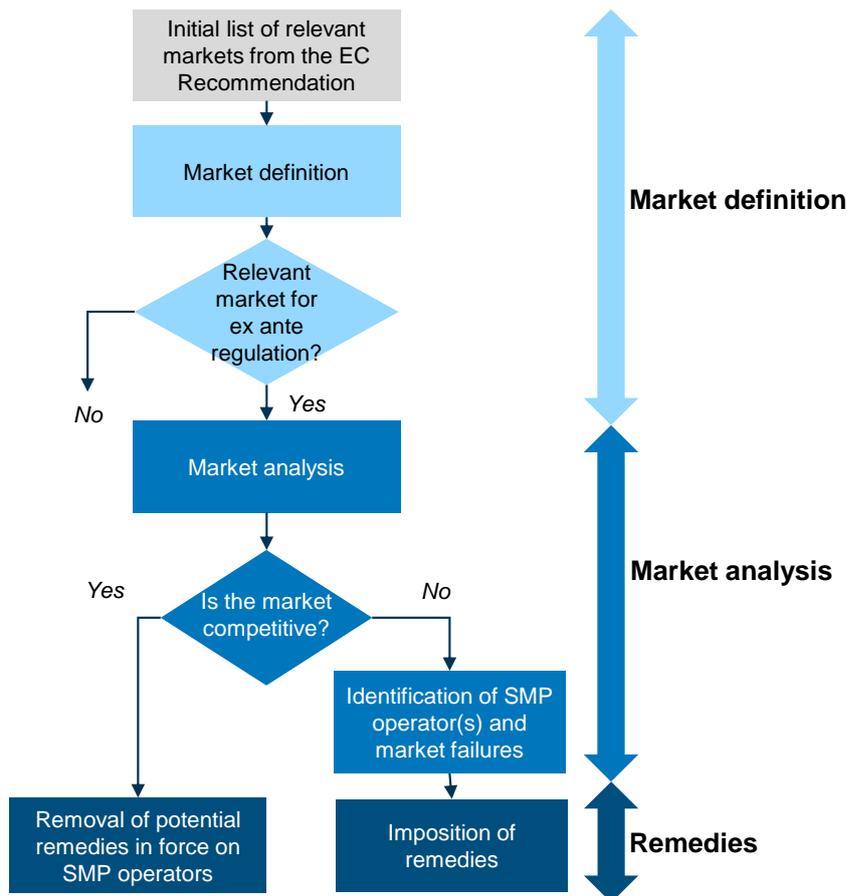


Figure 3.4: Market analysis process in the EU [Source: European Commission, *Analysys Mason, 2012*]

We explain below the main principles of the market definition and market analysis phase. The next section describes the principles for selecting remedies (in the case of a non-competitive market).

► *Market definition*

The first step for a regulator in a market analysis process is the market definition, which consists of identifying the list of products and geographical boundaries that comprise a relevant market for ex-ante regulation

In order to define the market boundaries correctly, it is necessary to identify the competitive constraints on the price-setting behaviour of the firms supplying the relevant service. There are two sources of competitive constraints on the price-setting behaviour of firms that should be considered in identifying the services that should belong to the same economic market.

- **Demand-side substitutability** represents the ability and willingness of consumers to substitute the service in question with other available services. Suitable services will be substitutes to the extent that they can provide similar functionalities, or can satisfy consumer needs to the same extent as the relevant service. The key issue is to determine whether or not the price of a potential substitute service effectively constrains the price of the relevant service.

- **Supply-side substitutability** refers to the ability of a firm to promptly switch its production from its current services to the service in question (or a substitute service).

In order to identify constraints on price-setting behaviour arising from demand-side and supply-side substitution, it is common practice to apply the “hypothetical monopolist test”. The principle of the hypothetical monopolist test – at least as a theoretical framework – is that a market should be defined as a service (or a group of services) such that a hypothetical, profit-maximising firm not subject to price regulation, which was the only present and future seller of that service (or group of services), could profitably impose a small but significant non-transitory increase in price (SSNIP) above prevailing or likely future levels. It is common practice to assume a price increase of the order of 5–10%.

► *Market analysis*

Market analysis aims to determine the level of competition (and potential market failures) in a relevant market by assessing the market power of main players active in this market.

The dominance, or significant market power (SMP), refers to the ability of a company or a group of companies to maintain the prices of their products and/or services above competitive levels. The EU Regulatory Framework states that the existence of SMP requires ex-ante regulation.⁴ The EU Regulatory Framework specifies that a company:

“shall be deemed to have significant market power if, either individually or jointly with others, it enjoys a position equivalent to dominance, that is to say a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers.”⁵

SMP thus gives a company or a group of companies the ability to act independently of others (which is equivalent to the concept of ‘dominance’ used in competition law and in particular Article 102 of the Treaty for the Functioning of the European Union).

Dominance can be established either for one operator on its own (*single dominance*) or for two or more operators jointly (*joint dominance*).

In the EU, the assessment of SMP and the finding of a dominant position can be made only by reference to a number of criteria. The first relevant criterion is market share, which is often considered a proxy for market power. The examination of market share is, however, not conclusive on its own. It is important also to analyse the evolution of that market share over time: a declining market share may provide evidence of increasing competition, and a highly volatile market share – which fluctuates significantly over time – may indicate absence of market power. Furthermore, while the analysis of market share provides useful indications in mature markets with slow growth, it is less meaningful in emerging and rapidly growing markets. For these reasons, it is very common to also evaluate other quantitative and qualitative factors, such as product prices and profitability, size of the undertaking,

⁴ See Framework Directive 2002/21/EC, Paragraph 27.

⁵ Framework Directive, Article 14(2).

vertical integration, control of infrastructure not easy to duplicate, economies of scale and scope, technological advantages or superiority, commercial and regulatory barriers to entry, ability of customers to switch suppliers, countervailing buying power, etc.

Figure 3.5 below summarises the main SMP conclusion for all EU Member States for each of the seven relevant markets in the EU i.e. what type of operators have been declared as having SMP or has the market been found competitive in some countries.

Figure 3.5: Operators with SMP in EU countries [Source: European Commission, Analysys Mason, 2012]

Relevant market	SMP operators
M1: Access to PTSN for residential and non-residential users	Fixed incumbent operators have generally been designated as having SMP in their respective geographical markets (their network coverage) – with the exception of a few countries: Finland and the Netherlands which found the market to be competitive and the UK which has further segmented the market and found BT was non-dominant in the retail fixed-line analogue access markets (for residential and business customers)
M2: Call origination on fixed networks	All fixed incumbent operators have been designated as having SMP in their respective geographical markets (their network coverage)
M3: Call termination on fixed networks	All fixed operators (i.e. the incumbents and alternative operators) have been designated as having SMP with respect to the provision of call termination service on their respective networks
M4: Wholesale (physical) network infrastructure access	All fixed Incumbent operators have been designated as having SMP in their respective geographical markets
M5: Wholesale broadband access	Fixed incumbent (DSL) operators have generally been designated as having SMP in their respective geographical markets – with the exception of Malta and Romania which have declared the market as competitive and Austria, Poland, Portugal and the UK which have further segmented the market (e.g. geographic segmentation, residential/business) and found some of them to be competitive (e.g. in Austria, the market of residential customers was found to be competitive but not the market of business customers)
M6: Terminating segments of leased lines	Fixed Incumbent operators have generally been designated as having SMP in their respective geographical markets – with the exception of Austria, the Czech Republic, Hungary, Italy, Romania, Slovakia and the UK which have further segmented the market and found some of them to be competitive
M7: Voice call termination on mobile networks	All mobile operators have been designated as having SMP with respect to the provision of call termination service on their respective networks

Principles for selecting remedies and remedies imposed on dominant operators

If a market analysis establishes that a market is not effectively competitive, then the final stage in the process involves developing remedies to promote competition in that market by addressing the identified market issues/failures. In accordance with the EU regulatory framework and the relevant EC guidelines, when selecting appropriate remedies it is necessary to:

- take into account the existing regulations, so as to understand the transition and the burden that the proposed remedies will have on the SMP operator
- select remedies that are justified in terms of the specific market conditions, and aimed at addressing the market failures identified by the market analysis
- choose remedies that are in accordance with the principle of proportionality, which is well established in EU law, to ensure that *“the means used to attain a given end should be no more than what is appropriate and necessary to attain that end. In order to establish that a proposed measure is compatible with the principle of proportionality, the action to be taken must pursue a legitimate aim, and the means employed to achieve the aim must be both necessary and the least burdensome, i.e. it must be the minimum necessary to achieve the aim.”*⁶

In order to select and justify an appropriate set of remedies for the SMP operators, it is useful to consider the remedies under certain groupings, to assess whether they are justified and appropriate, and how they should be implemented in practice. For example, the European Commission uses the following categories for remedies in wholesale markets:

- access and interconnection
- transparency
- non-discrimination
- accounting separation
- price control.

Figure 3.6 presents, for each of the relevant markets, the type and range of obligations imposed on SMP operators.

⁶ Source: Point 119 of the “Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services”.

Figure 3.6: Main types of obligations imposed on SMP operators in EU countries [Source: European Commission, Analysys Mason, 2012]

	Access and interconnection	Transparency	Non-discrimination	Accounting separation	Price control
M1 & M2	Provision of interconnection that can include (depending on countries) call origination (carrier selection/pre-selection), wholesale line rental, access to and use of specific network facilities (co-location, internal cabling, backhaul facilities...)	Publication of a reference offer is usually imposed with access obligation. Notification to the regulator of condition changes with preliminary notice is sometimes imposed (e.g. UK) Provision of KPI and QoS in some countries	Non-discrimination is always imposed	Accounting separation is often imposed with the exception of a few countries (e.g. Germany)	Price is regulated on the basis of cost (typically for CS/CPS) or retail-minus approach (typically wholesale line rental) with a few exception (e.g. Finland with no price regulation)
M3	Obligation to provide termination service on each operator's network	Publication of reference offer usually imposed on the fixed incumbent operator but not necessarily on alternative operators (e.g. Spain, France)	Non-discrimination is always imposed	Accounting separation often imposed on fixed incumbent operator but not on alternative operators as this was often deemed disproportionate	Fixed incumbent operators are generally price-regulated on the basis of cost Historically some countries allowed asymmetric levels (e.g. in Belgium higher rate for alternative operators but a 2009 EC recommendation requested the evolution towards symmetric levels (and most regulators are in the process of applying it)
M4	Obligation always includes provision of copper pair local loop unbundling (full and shared) and ancillary services (e.g. co-location) Obligation can in some countries also include duct sharing (e.g. France, Germany, Italy), dark fibre (e.g. Germany), fibre unbundling (e.g. Netherlands) and virtual unbundling offer (e.g. UK)	Publication of a reference offer is always imposed with access obligation	Non-discrimination is always imposed	Accounting separation is often imposed with the exception of a few countries (e.g. Germany)	Price is always regulated on cost

	Access and interconnection	Transparency	Non-discrimination	Accounting separation	Price control
M5	Obligation always includes provision of bitstream services based on copper pair Fibre-based bitstream services and multicast services are also imposed in a few countries (e.g. Netherlands, Italy...)	Publication of a reference offer is always imposed with access obligation	Non-discrimination is always imposed	Accounting separation is often imposed with the exception of a few countries (e.g. Germany)	Prices can be regulated on a cost basis or retail-minus basis
M6	Provision of access to leased lines terminating segments Access to ancillary services is imposed in some countries (partial circuits, co-location....)	Publication of a reference offer is usually imposed with access obligation. Provision of KPI and QoS imposed in some countries (e.g. UK)	Non-discrimination is always imposed	Accounting separation is often imposed with the exception of a few countries (e.g. Germany)	Price are usually regulated on a cost basis and sometimes on a retail-minus basis (e.g. Spain)
M7	Obligation to provide termination service on each operator's network	Publication of reference offer is usually imposed	Non-discrimination is always imposed	Accounting separation is often imposed on main (largest) mobile operators but not necessarily on smaller ones as this was deemed disproportionate	Price is regulated on the basis of cost Historically numerous countries allowed asymmetric levels (e.g. in France, Belgium and the UK higher rates for late entrants but a 2009 EC recommendation requested the evolution towards symmetric levels (and most regulators are in the process of applying it)

3.2 Africa: SADC and other selected African countries

This section presents the market analyses and associated remedies imposed on dominant operators in the four SADC countries that have already gone through such a process (Botswana, South-Africa, Tanzania, Zambia) as well as in Kenya and Morocco. For these countries, we first present the regulatory framework, then the market definitions and the analysis process, followed by the principles for selecting remedies and the remedies imposed on dominant operators.

Regulatory framework

Although the six countries in our benchmark have all conducted a market analysis, only half of these countries have a formal obligation to carry out such a market analysis based on their regulatory framework.

Botswana: only a general provision about competition promotion Section 17 of the Telecommunications Act, Chapter 72:03⁷ states that the national regulator (BTA) shall “promote and maintain competition among persons engaged in commercial activities for or in connection with the provision of telecommunication services, and promote efficiency and economy on the part of persons so engaged.” It is under the provision of this article that BTA conducted its market analysis in 2008-2009.⁸

South-Africa: the regulator has published guidelines Section 67(4) of the Electronic Communications Act⁹ (ECA) provides the South African regulator ICASA with the legislative powers to address potential market failures but does not determine a precise framework for such intervention. In March 2010, ICASA therefore published guidelines¹⁰ for conducting appropriate market analyses.

To date, these guidelines have not been used and the only market analysis that ICASA has conducted is based on Section 37(1) of the ECA, which imposes an obligation to interconnect and gives power to intervene to ICASA.

⁷ <http://www.bta.org.bw/docs/documents/TELECOMMUNICATIONS%20ACT.pdf>.

⁸ http://www.bta.org.bw/docs/documents/Presentation_by_Analysys%20Mason_on_the_Botswana_Telecommunications_and_ICT_Market_Study.pdf

⁹ <http://www.info.gov.za/view/DownloadFileAction?id=67890>.

¹⁰ <http://thornton.co.za/resources/Guideline%20for%20Conducting%20Market%20Reviews.pdf>.

Tanzania: formal obligation to determine dominance

Section 61 of the Electronic and Postal Communications Act,¹¹ 2010 (EPOCA) gives powers to the Tanzania Communications Regulatory Authority (TCRA) to determine dominant position of electronic communication licensee in the relevant market. In accordance with Section 62(1) of EPOCA, the Authority is required no later than 31 December of each year to publish in the Gazette a list of:

- all electronic communications markets that will or are likely to exist; and
- in each of these markets, the potential electronic communications licensees determined by EPOCA to hold a dominant position.

Zambia: formal obligation to determine dominance

In accordance with Section 40 of the ICT Act of 2009 and the Competition Guidelines of 2012, the Zambia Information and Communications Technology Authority (ZICTA) is obliged to, at the end of every calendar year, determine and publish the following:¹²

- all retail and wholesale electronic communication markets that ZICTA determines warrant for regulatory control
- licensees considered as holding, for each communication market identified, a dominant position.

Kenya: a relatively vague regulatory framework

The regulatory framework for market analysis in Kenya is quite vague and leaves a lot of freedom to the Communications Commission of Kenya (CCK): Section 6(1) of the Kenya Information and Communications (Tariff) Regulations, 2010¹³ only states that “The Commission may from time to time publish in the Gazette a schedule of regulated services”. However, the CCK has published a well-structured analysis in its consultation paper on *Regulated Services in Specific Markets in the Kenya’s Telecommunications Sector*.¹⁴

¹¹ <http://www.tcra.go.tz/policy/epoca.pdf>.

¹² <http://www.zicta.zm/index.php?view=article&catid=16%3Anews&id=171%3Amarket-dominance-determi%E2%80%A6>

¹³ http://www.cck.go.ke/regulations/downloads/Kenya_Information_and_Communication_Tariff_Regulations_2010.pdf.

¹⁴ http://www.cck.go.ke/links/consultations/current_consultations/Regulated_Services.pdf.

Morocco: formal obligation to determine dominance Under the provisions of Article 15 of Decree No. 2-97-1025,¹⁵ the national regulator (ANRT) annually designates operators having a significant influence in specific markets. Under this article, “the ANRT shall set, after consulting the operators of public telecommunications networks, motivating them, the obligations concerning the provision of services by operators having significant influence in a specific market, as well as the technical and pricing conditions for the provision of such services.”

Market definitions and analyses

The processes used to define the relevant markets and to analyse them have not been formally published. However, we have been involved in some of these analyses and can mention that an approach based on demand-side and supply-side substitutability was used.

Figure 3.7 presents the market definitions and the results of the market analyses for wholesale markets. Figure 3.8 shows the market definitions and the results of the market analyses for retail markets.

Figure 3.7: Relevant wholesale markets identified in the selected countries [Source: Regulators’ and Governments’ websites, Analysys Mason, 2012]

Country	Relevant wholesale markets	SMP operators
Botswana ¹⁶	Mobile termination	Not determined yet
	Fixed termination	Not determined yet
	Wholesale leased lines	Not determined yet
	Wholesale ADSL	Not determined yet
	Wholesale international Internet leased lines	Not determined yet
South Africa ¹⁷	Call termination	- All licensees offering call termination are considered as having SMP - Vodacom, MTN, Cell C, Telkom are considered as having Established SMP ¹⁸
Tanzania ¹⁹	Fixed termination	All terminating fixed voice operators
	Mobile termination	All terminating mobile voice operators

¹⁵ http://www.itu.int/ITU-D/treg/Legislation/Morocco/Decr2_97_1025.htm

¹⁶ http://www.bta.org.bw/docs/documents/Regulatory_Directive_No_1_FINAL_2011.pdf

¹⁷ <https://www.icasa.org.za/Portals/0/Regulations/Media%20Release/Statement%20from%20Media%20Briefing%20on%20Interconnection%20and%20Call%20Termination.pdf>

¹⁸ The concept of Established SMP is detailed in the following section: Principles for selecting remedies and remedies imposed on dominant operators

¹⁹ <http://www.tcra.go.tz/headlines/electronicCommMarkets.pdf>

Country	Relevant wholesale markets	SMP operators
	Wholesale leased lines and transmission	NICTBB/ TTCL
	Wholesale broadband Internet access	<i>None (competitive market)</i>
	International connectivity (sub-sea cables)	<i>None (competitive market)</i>
Zambia ²⁰	Fixed termination	Zamtel
	Mobile voice termination	Airtel Zambia, MTN Zambia and Zamtel
	Mobile SMS termination	All mobile network operators
	Wholesale data transmission links	ZESCO, Zamtel and CED Liquid
	Wholesale internet	ZESCO, Zamtel and CED Liquid
Kenya ²¹	Fixed voice termination (including restricted mobility)	All terminating fixed voice operators
	Mobile voice and SMS termination	All terminating mobile voice operators
	Fixed transit	Telkom Kenya
	Wholesale leased lines/transmission links	<i>Nascent market, regulation not appropriate</i>
	Wholesale internet access	<i>Nascent market, regulation not appropriate</i>
	International connectivity	<i>Nascent market, regulation not appropriate</i>
Morocco ²²	Fixed voice termination (including limited mobility)	IAM
	Mobile voice termination	IAM and Médi Telecom
	Mobile SMS termination	IAM and Médi Telecom
	Wholesale leased lines (LLO and LLA)	IAM

Figure 3.8: Relevant retail markets identified in the selected countries [Source: Regulators' and Governments' websites, Analysys Mason, 2012]

Country	Relevant retail markets	SMP operators
Botswana ²³	Fixed local/national voice	BTC
	Mobile	<i>None (competitive market)</i>
	Leased lines	BTC
	Broadband Internet access	BTC
	International voice	BTC
	International data	BTC

²⁰ <http://www.zicta.zm/index.php?view=article&catid=16%3Anews&id=171%3Amarket-dominance-determi%E2%80%A6>

²¹ http://www.cck.go.ke/links/consultations/current_consultations/Regulated_Services.pdf

²² <http://www.anrt.ma/sites/default/files/documentation/2011-06-11-marche-part-2012-2013-2014-fr.pdf> and <http://www.anrt.ma/sites/default/files/2011-07-11-ERPT-influence-significative-marches-particuliers-2012-fr.pdf>

²³ http://www.bta.org.bw/docs/documents/Presentation_by_Analysys%20Mason_on_the_Botswana_Telecommunications_and_ICT_Market_Study.pdf.

Country	Relevant retail markets	SMP operators
South Africa	<i>ICASA does not identify any relevant retail market</i>	
Tanzania ²⁴	Call origination (including fixed and mobile)	<i>None (competitive market)</i>
	Fixed access	TTCL
	Retail leased lines	<i>None (competitive market)</i>
	Retail Internet access	<i>None (competitive market)</i>
Zambia ²⁵	Fixed voice	Zamtel
	Mobile voice (local)	Airtel Zambia and MTN Zambia
	SMS	Airtel Zambia and MTN Zambia
	MMS	Airtel Zambia and MTN Zambia
	Internet – mobile	Airtel Zambia and MTN Zambia
Kenya ²⁶	Fixed voice services	Telkom Kenya
	Mobile voice and SMS services	Safaricom
	Leased lines	<i>None (competitive market)</i>
Morocco	<i>ANRT does not identify any relevant retail market</i>	

Principles for selecting remedies and remedies imposed on dominant operators

The only country in our benchmark which has published specific principles for selecting remedies is South Africa. ICASA's guidelines²⁷ for conducting market analyses include a discussion on possible pro-competitive terms and conditions. ICASA insists on the fact that the imposition of any obligation is only intended to correct specific market failures (identified from the market analysis).

Amongst the identified pro-competitive conditions, ICASA lists the following obligations to be examined:

- transparency, non-discrimination and accounting separation
- price controls
- controls on the type of services to be provided.

ICASA adds that this list is not exhaustive and that it may impose any other pro-competitive terms and conditions designed to address any identified market failure.

In the rest of this section, we present the different remedies that are currently imposed on operators that have been declared (or are expected to be declared) dominant/as having SMP.

²⁴ <http://www.tcra.go.tz/headlines/electronicCommMarkets.pdf>.

²⁵ <http://www.zicta.zm/index.php?view=article&catid=16%3Anews&id=171%3Amarket-dominance-determi%E2%80%A6>.

²⁶ http://www.cck.go.ke/links/consultations/current_consultations/Regulated_Services.pdf.

²⁷ <http://thornton.co.za/resources/Guideline%20for%20Conducting%20Market%20Reviews.pdf>.

► *Botswana*

BTA has simultaneously conducted a market analysis including the determination of operators having a dominant position, and a study aimed to decide which remedies would be most appropriate.

The remedies have been published first and do not exactly match the market analysis conclusion. The wholesale market analysis has not been released yet but Regulatory Directive No.1 of 2011²⁸ imposes ex-ante regulation on the three operators holding a converged licence (called PTOs in the Botswana regulatory framework). Figure 3.9 below presents the current regulation in wholesale markets.

Figure 3.9: Ex-ante regulation in wholesale markets in Botswana [Source: BTA, Analysys Mason, 2012]

Ex-ante regulated markets	Regulation for every PTO
Mobile termination	Cost oriented termination rates detailed in Table 2 of Regulatory Directive No.1 of 2011
Fixed termination	Cost oriented termination rates detailed in Table 1 of Regulatory Directive No.1 of 2011
Wholesale leased lines	Regulated prices detailed in Table 4, 5 and 6 and is Section 10.8 of Regulatory Directive No.1 of 2011
Wholesale ADSL	Regulated prices detailed in Table 3 and is Section 10.4 of Regulatory Directive No.1 of 2011
Wholesale International Internet Leased Lines	Regulated prices detailed in Table 7 of Regulatory Directive No.1 of 2011

In addition to the regulation of wholesale markets, Regulatory Directive No.1 of 2011 includes provision to ensure that the reductions imposed on wholesale tariffs are passed onto retail tariffs.

Although BTC has been declared dominant in several retail markets, no remedy has been imposed on the operator yet.

► *South Africa*

ICASA has identified the following market failures in the provision of call termination services:²⁹

- a lack of sufficient access to network
- a lack of transparency
- discrimination concern
- inefficient pricing.

ICASA has imposed remedies that are differentiated for:

²⁸ http://www.bta.org.bw/docs/documents/Regulatory_Directive_No_1_FINAL_2011.pdf

²⁹ <https://www.icasa.org.za/Portals/0/Regulations/Media%20Release/Statement%20from%20Media%20Briefing%20on%20Interconnection%20and%20Call%20Termination.pdf>

- operators declared as having SMP
- operators with an “established presence in the market” (no more precise criterion is provided to determine a threshold to “established”). Telkom, MTN, Vodacom and Cell C are declared as having ‘Established SMP’ (ESMP).

Figure 3.10 presents the remedies imposed on these two categories of operators.

Figure 3.10: Remedies imposed on dominant operators in South Africa [Source: ICASA, Analysys Mason, 2012]

Ex-ante regulated market	Remedies for SMP operators	Remedies for ESMP operators
Call termination (fixed and mobile)	<p>Comply with the Interconnection Regulations</p> <p>Provide relevant market data on a bi-annual basis</p> <p>If a licensee provides termination to a fixed location, it will be expected to offer termination rates as set for Telkom</p> <p>If a licensee provides termination to a mobile location, it will be expected to offer termination rates as set for MTN, Vodacom and Cell C</p>	<p>Provide a Reference Interconnection Offer (RIO) to fast-track interconnection requests</p> <p>Provide cost accounting and accounting separation</p> <p>Provide relevant market data on a bi-annual basis</p> <p>Mobile termination rates are proposed to be reduced to R 0.65 from July 2010 and further reduced to R 0.40 from July 2012</p> <p>Fixed termination rates are proposed to be reduced to R 0.15 from July 2010 and further reduced to R 0.10 from July 2012</p>

► Tanzania

Similarly to Botswana, Tanzania has conducted simultaneously its market analysis and the definition of an ex-ante regulation framework for interconnection. The results of the market analysis undertaken by TCRA were published on 20 December 2011. The remedies imposed on the operators identified as having a dominant position in the relevant wholesale and retail markets have not been published yet.

However, Government notice No. 425 published on 9 December 2011³⁰ imposes ex-ante regulation for fixed and mobile termination, as shown in Figure 3.11.

Figure 3.11: Remedies imposed on dominant operators in Tanzania [Source: TCRA, Analysys Mason, 2012]

Ex-ante regulated markets	Remedies for all operators
Call termination (fixed and mobile)	<p>Provide a Reference Interconnection Offer (RIO) approved by TCRA</p> <p>Obligation to negotiate in good faith</p> <p>Transparency, non-discrimination</p> <p>Cost orientation based on forward-looking long-run incremental</p>

³⁰ <http://www.tcra.go.tz/regulation/interconnection.pdf>

costs
Possibility of TCRA arbitration

► *Zambia*

The remedies defined in the Zambian regulatory framework for every operator having a dominant position in a relevant market are as follows:³¹

- submit to ZICTA for its prior approval all tariffs the operator intends to charge to the public for each service together with a detailed justification for tariff adjustment
- never apply tariffs without the approval of ZICTA.

► *Kenya*

The CCK has imposed remedies on dominant operators both in the retail and the wholesale markets.³² Figure 3.12 below presents the remedies imposed on Safaricom (the leading mobile operator in Kenya) for retail mobile voice and SMS; on all operators for call and SMS termination; and on Telkom Kenya (the incumbent fixed operator) for fixed transit.

Figure 3.12: Remedies imposed on dominant operators in Kenya [Source: CCK, Analysys Mason, 2012]

Ex-ante regulated markets	Remedies for SMP operators
Retail mobile voice and SMS services	Price cap for off-net call prices to the level of on-net prices
Call termination (fixed, restricted mobility and mobile)	Price cap detailed in Table 1 of Determination No. 2, 2010
SMS termination	Price cap detailed in Table 1 of Addendum to Determination No. 2, 2010
Fixed transit	Price cap detailed in Table 1 of Determination No. 2, 2010

► *Morocco*

ANRT has identified relevant market for ex-ante regulation only on the wholesale markets³³. The remedies imposed for these markets are detailed in the Figure 3.13 and mostly consist in the publication of a technical and pricing offer, the separation of accounts and the respect of the principle of replicability in the retail offers.

³¹ <http://www.zicta.zm/index.php?view=article&catid=16%3Anews&id=171%3Amarket-dominance-determi%E2%80%A6>

³² http://www.cck.go.ke/regulations/downloads/interconnection_determination_no2_2010.pdf and http://www.cck.go.ke/regulations/downloads/DETERMINATION_NO_SMS_rates_Dec_22nd_2010_pdf.pdf

³³ <http://www.anrt.ma/sites/default/files/documentation/2011-06-11-marche-part-2012-2013-2014-fr.pdf>

Figure 3.13: Remedies imposed on dominant operators in Morocco [Source: ANRT, Analysys Mason, 2012]

Ex-ante regulated markets	Remedies for SMP operators
Fixed voice termination (including restricted mobility)	Reference technical and pricing offer including flat rate interconnection offer (to capacity) Separated accounts Replicability in the retail offers
Mobile voice termination	Reference technical and pricing offer Separated accounts Reasonable access Replicability in the retail offers
Mobile SMS termination	
Wholesale leased lines (LLO and LLA)	Reference technical and pricing offer annexed Non-discrimination

3.3 Conclusion on the market analysis process in other jurisdictions

The analysis of the market analysis process and regulatory decisions from the benchmark countries (the EU and six relevant African countries) allows us to draw the following conclusions:

Regarding market definition If the relevant markets defined by national regulators typically vary between countries, all regulators that have performed market analysis have defined:

- relatively narrow markets (e.g. call termination)
- at least five separate relevant telecommunications markets (typically call termination on voice network, call termination on fixed networks, termination segments, wholesale broadband market...).

Market definition is also key in selecting relevant remedies as these have to be related to the boundaries of the relevant market. For example, it would not make much sense to impose a mobile call termination obligation on a fixed-only operator.

Although both the European Union and Kenya promote technology and service neutrality and have introduced a unified authorisation or licensing framework, they use an approach based on demand-side and supply-side substitutability to define the relevant markets.

Regarding market analysis Apart from the EU that provided detailed guidelines (and a list of criteria) to assess the market power and potential dominance of market players, only South Africa has defined a framework that governs the process for performing a market analysis.

It can be noted that explicitly (like in the EU framework) or implicitly (in most the African countries of our benchmark) emerging/nascent markets (where de facto the market leader is likely to have a substantial market

share) are generally not regulated.

Regarding the selection of relevant remedies

All countries in our benchmark impose regulatory obligations that are related to the scope of the market they have previously defined. These obligations vary per relevant market and, in some cases, are based on the level of dominance of the respective players. There is therefore not a “one size fits all” approach for the selection of remedies.

Moreover, the EU and South African frameworks identify market failures or market issues that the regulatory obligations (imposed on dominant operators) aim to address.

Finally, some regulators explain why they select the remedies they impose on dominant operators. For example, the EU framework introduces the notion of justification and proportionality for suggested remedies.

The notion of justification refers to the objective of the proposed remedy i.e. how efficient and relevant the obligation considered is in addressing market problems.

The notion of proportionality refers to the burden of the obligation for the dominant operator(s) i.e. is there any lighter obligation that would fulfil the same purpose? This notion of proportionality is particularly relevant since too burdensome or intrusive remedies can artificially alter the competition forces at stake and unduly favour alternative operators that have not invested or taken the same risks as the now dominant operators.

4 Conclusions and comments on the market analysis process in Namibia

This section presents our conclusions and our comments about the market analysis process in Namibia.

Regarding market definition

The relevant markets that CRAN intends to define with the “service and technological neutral market definition” approach (“telecommunications services” and “broadcasting services”) are much wider than those defined by any other regulator in our benchmark.

The potential issue with this approach is that competition is heterogeneous in the overall telecommunications market: for example, we understand that Telecom Namibia holds a strong position on fixed services but not on mobile services, while MTC and Leo have a strong position on mobile services but not on fixed services. By defining the relevant market as “telecommunications services”, CRAN will impose at least all of the automatic remedies listed in Figure 2.2 on the “dominant operators”, including in areas or for services where they have a weak position (mobile activities for Telecom Namibia and fixed activities for MTC and Leo).

Alternatively, the approach followed in the benchmark countries at the market definition stage aims to define a list of products or services that are sufficiently comparable or “substitutable” (from a demand- or supply-side perspective) to belong to the same relevant market. This market definition then allows an analysis of the market power of the players that are active within a market with well-defined boundaries. Such an approach corresponds to the “Demand-side and supply-side substitutability” approach analysed in the Notice. We note however that, unlike the way it is presented in CRAN’s Notice, such an approach does not necessarily lead to 18 relevant markets. In Europe, the European Commission, which initially listed 18 relevant markets in 2003, reduced this list to 7 markets in 2007. Overall, all regulators in our benchmark have identified between 5 and 10 relevant markets using this approach. The “demand-side and supply-side substitutability” approach could therefore likewise be used by CRAN and lead to comparable outcomes i.e. a manageable list of relevant markets adapted to the national specifics.

We do not believe that the other approaches considered by CRAN would provide satisfactory outcomes. For examples, we understand that all the other approaches as applied by CRAN would mix fixed and mobile services

whereas competition is quite heterogeneous in these “*two segments*” i.e. market players do not have comparable market power in the provision of fixed and mobile services.

Furthermore, the argumentation used to select the “service and technological neutral market definition” approach raises a number of issues and inconsistencies. Indeed the approach recommended by CRAN aims to :

- Minimise the regulatory burden on the operators and CRAN. Although we understand that the definition of a single telecommunications market will lead to an “easy process” (in fact no market definition is done in practice), it will also lead to a situation where significant unnecessary regulation is imposed on operators in areas where they have weak market power. Not only does this approach increase the burden on the dominant operators but it also increases the burden on the regulator which needs to define and make sure these obligations are complied with by operators. The goal of market analyses is precisely to adapt regulation to market conditions and only to impose the minimum obligations that are required in the market.
- Be suited to a converged ICT sector based on technology- and service-neutral regulation. We understand that Namibia has introduced a unified licensing framework in order to remove unnecessary technology and service differentiations and to promote competition between players with strong positions in different segments of the telecommunications market. However, this unified licencing framework does not imply the definition of a single relevant market (i.e. the “telecommunications services”). In fact, by imposing unnecessary regulation on operators in areas where they have weak market power, CRAN will deter “dominant operators” from competing in segments where they do not have significant market power. In other words, it will probably be difficult for mobile operators to invest in the fixed segment if, from the start of their operations, they bear all of the obligations imposed on fixed operators; Symmetrically, it will be difficult for Telecom Namibia to invest in the mobile segment if, from the start of its operations, it bears all of the obligations imposed on mobile operators. As a result, this wide market definition (together with the application of automatic remedies) is unlikely to promote the development of competition. We can also note that, although both the EU and Kenya promote technology and service neutrality and have introduced a unified licensing framework, they use a “demand-side and supply-side substitutability” approach in their market definitions.

Regarding market The four independent criteria are also quite wide and can lead to nearly any

analysis

operator being declared “dominant”.

In most countries, dominance implies the capacity to behave independently from competitors and, ultimately, from its clients. This is also what Section 78(4) (a) mentions in Namibia: “A share of the market in the class of telecommunications services in question, *such that the operator is able to act independent of its competitors*”.

In this context, the number of dominant operators is limited to one player in each relevant market (single dominance) with the exception of “joint dominance”, where several operators can be all dominants (in the same relevant market) if it can be demonstrated that they all they all behave like a single entity. Indeed, if by definition, dominant operators are able to behave independently from their competitors, two operators cannot be dominant in the same relevant market³⁴.

Given the Namibian regulatory framework set by the 2009 Act, a way to address this inconsistency seems to be the application of Section 78(5), which explains that the market power of competitors should also be taken into account. We have however noted previously that the Notice does not provide any additional detail about the implementation of such a test. We believe this test should be detailed in order to address this issue.

Regarding remedies

Most regulatory remedies can have pros (e.g. stimulate market entry and competition, prevent anticompetitive pricing) and cons (be not fully or enough aligned to the market problems in order to promote viable competition, discourage investment and infrastructure based competition...). It is therefore a regulatory best practice to carefully select remedies that maximise the remedy positive effects and minimise the negative ones.

The remedies of the Namibian regulatory framework, presented in Figure 2.2, raise several issues:

- Numerous automatic remedies imply significant burden on the dominant operators and appear to address only specific situations. As an example, “unbundled access to network elements” (typically local loop unbundling) is generally applied to incumbent fixed operator but not to alternative fixed operators or mobile operators, as the implementation cost of opening a network are typically high and not justified for all operators. Under the framework presented in the Notice, such an obligation would be automatically imposed on MTC and Leo if they

³⁴

It should be noted that there is no substitutability for call termination services to different operators. As a result, for each operator, a relevant market is defined for the provision of call termination service to its network. All operators are therefore dominant, but on different relevant markets.

started to offer fixed services although their market positioning will be very weak initially. As a result, it would probably jeopardise such initiatives from these mobile operators and could therefore act as a barrier to investment.

- Numerous remedies need to be further defined and detailed. As an example, the term “infrastructure” is not defined in the “infrastructure sharing” remedy specified in Section 50 (1) whereas this term can refer to a wide range of products and obligation: ducts, in-building wiring, local loop/subloop, dark fibre, active transmission links, active equipment or even a full network. In appropriate conditions, duct or fibre access can have a significant impact on the development of competition by allowing the reduction of barriers to entry and promoting infrastructure-based competition. Conversely, sharing of active equipment promotes more service-based competition and can be used by operators to avoid investment and the financial risk that other players had to take in the past. Whereas such obligation can be justified in the case of essential facility and non-replicable assets, the “non-replicable nature” of active equipment and transmission would need to be fully assessed and justified before a sharing obligation is imposed.

Without any contradiction with the Namibian framework set by the 2009 Act, we would therefore suggest that when CRAN considers imposing (or refining) a remedy, it applies a justification and proportionality test. This would aim to ensure that the suggested remedy (automatic or additional) :

- is adapted to the market conditions and addresses potential market issues
- promotes competition for the benefits of customers, while being as little burdensome as possible for the dominant operators.

If this approach indicates that the considered remedy would not be fully justified or proportionate, two options could be used by CRAN :

- Define relevant markets that are narrower than the overall telecommunications market in order to ensure that remedies only apply to the provision of a well-defined list of services (on which the dominant operator is indeed able to behave independently from its competitors).
- Refine the precise content of each remedy (automatic or additional) so that they are designed to be focused and as little intrusive and burdensome as possible.

Figure 4.1 presents a synthesis of our comments on the market analysis process in Namibia.

Figure 4.1: Synthesis of Analysys Mason comments on the market analysis process in Namibia [Source: Analysys Mason, 2012]

Step of the market analysis	Comment
Market definition	<p>The “service and technological neutral market definition” approach suggested by CRAN leads to the identification of a single relevant market (which is unprecedented in all our benchmark countries). We do not believe this approach is appropriate as it would not allow CRAN to adapt regulation to the specificities of the Namibian telecommunications market.</p> <p>Among the other approaches considered by CRAN, the “demand-side and supply-side substitutability” appears the most appropriate as it would allow CRAN to adapt regulation to the specific situation of each relevant market (appropriately defined). Such an approach does not necessarily lead to a very large number of relevant markets. Overall, all regulators in our benchmark (EU countries and 6 relevant African countries) have identified between 5 and 10 relevant markets using this approach.</p>
Market analysis	<p>By “definition”, the number of dominant operators should be limited to one player in each relevant market (single dominance) with the exception of “joint dominance” where several operators can be all declared dominants (in the same relevant market) if it can be demonstrated that they all behave like a single entity. In this context, given the Namibian regulatory framework set by the 2009 Act, a way to address this inconsistency could be the application of Section 78(5), which should be detailed in order to correctly reflect that a dominant “operator is able to act independent of its competitors”.</p>
Remedies	<p>When CRAN considers imposing (or refining) a remedy, it should apply a justification and proportionality test to ensure that the suggested remedy (automatic or additional) is adapted to the market conditions, aims to address potential market issues, promotes competition for the benefits of customers, while being as little burdensome as possible for the dominant operators.</p> <p>Should Telecom Namibia, MTC and Leo be declared all “dominant” on the “telecommunications services” market, the automatic (wide) remedies included in the 2009 Act (detailed in Figure 2.2) would probably not pass such a justification and proportionality test because unnecessary regulation would be imposed on operators in areas where they have low market power, and could act as a barrier to investment.</p> <p>Given the Namibian regulatory framework set by the 2009 Act, ways to address such issues include:</p> <ul style="list-style-type: none"> • Defining relevant markets that are narrower than a single overall telecommunications market in order to ensure that remedies only apply to the provision of a well-defined list of services (on which the dominant operator is indeed able to behave independently from its competitors). • Refining the precise content of each remedy (automatic or additional) so that they are designed to be focused to the real market issues and be as little intrusive and burdensome as possible for the dominant operator

Annex A Analysys Mason's experience in market analysis

A selection of our experience in this area is provided below.

Market analysis assistance for IBPT We assisted the Belgian regulator, BIPT, in implementing the New Regulatory Framework, in collaboration with a legal partner. This included market competition analyses of Markets 1 to 17 of the 2003 EC list of relevant markets. The project allowed BIPT to deliver national and European consultation documents providing details on the definition, analysis and identification of remedies to be applied to the relevant national markets in Belgium (including wholesale and retail broadband markets).

Analysis of market 18 in Belgium We assisted the Belgian regulator, BIPT, with the analysis of Market 18 in the 2003 European Commission's list of relevant markets (broadcasting transmission services, delivering broadcast content to end users). As part of this project, we have analysed the moving boundaries of the broadcasting and pay-TV market and we have assessed potential market failures that may prevent market development.

Second round implementation of New European Regulatory Framework for BIPT We assisted the Belgian regulator, BIPT, in the second round of implementation of the European New Regulatory Framework, in collaboration with a legal partner. This included market competition analyses of the relevant product markets for broadband (including wholesale and retail broadband markets), with particular emphasis on issues such as next-generation access and competition between DSL and cable. The aim of the project was to enable BIPT to prepare a definition of each relevant market, analyse the level of competition, and identify remedies to be applied to each market to promote competition in Belgium.

Market analysis in Luxemburg In partnership with a law firm, we helped the Luxembourg regulator (ILR) implement the New Regulatory Framework by undertaking a market analysis in Luxembourg on Markets 1 to 17 of the European Commission's 2003 list of relevant markets (including the wholesale and retail broadband markets). We were also in charge of training the ILR telecoms team in regulatory, economics and market competition issues.

<i>Analysis of Market 18 in Luxembourg</i>	For the regulator in Luxembourg, ILR, we supported an analysis of Market 18 of the European Commission's 2003 list of relevant markets (broadcasting transmission services, delivering broadcast content to end users). Our work identified nine different sub-markets and our analysis showed that none of them passed the 'three-criteria test'. We concluded that these markets were not relevant for ex-ante regulation in Luxembourg.
<i>Market analysis assistance for incumbent operator</i>	We assisted an incumbent operator in Central and Eastern Europe in reviewing six of the markets included in the EU Regulatory Framework. For each market we defined the relevant product market, assessed current and future competition, and assessed the likely regulatory obligations that the NRA might impose on SMP operators. The client used our report in its interactions with the NRA during the market analysis process.
<i>Study for the European Commission on Regulatory Framework review</i>	For the EC, we conducted a study contributing to its 2006 review of the EU Regulatory Framework, in collaboration with law firm Hogan & Hartson LLP. We considered issues arising from likely sector developments over the next five to ten years as well as those already experienced in implementing the existing Framework, and gathered opinions from a wide range of operators and user organisations across the EU25. This led to the development of a series of recommendations for amendments to the Framework from 2010.
<i>Mobile termination market analysis for European regulator</i>	We provided the regulator of a Mediterranean EU Member State with a thorough examination of mobile termination under its jurisdiction. With a legal and economic partner, we examined the mobile termination market, including definition of the market, analysis of market power and assessment of the nature of market failure, and then proposed a set of remedies. This work was carried out under the EU Framework. In addition, we developed a LRIC model of the costs of mobile services, according to recognised best-practice principles, allowing the cost of termination on each mobile operator's network to be assessed. These results were used to inform cost-oriented remedies and to understand the key factors influencing the costs of each operator's termination service.
<i>Analysis of the markets for mobile access and call origination for the OCECPR</i>	Analysys Mason assisted the NRA of Cyprus, OCECPR, in the analysis of the mobile access and call origination, and voice call termination markets under the EU Framework. Our work included the assessment of the impact of regulatory remedies such as the obligation to provide access to MVNOs.

*Analytical report
on SMP practice*

For a mobile operator in a European country, we conducted a study to provide an analytical report on the investigation and regulation of significant market power (SMP) in telecoms markets in Europe. The tasks that we conducted included: describe the definition used by the EU for SMP and the different criteria used for the analysis of single or joint dominance by the EC, the ERG and some European regulators; describe the methodologies used by regulators to calculate interconnection costs for fixed and mobile operators; provide the differences between fixed and mobile termination rates in the EU, and explore the rationale for such differences; provide a number of arguments for the difference in interconnection rates currently accepted by the ERG and other regulators when setting interconnection rates for fixed and mobile operators and assess the situation of interconnection rates in the country where the mobile operator operates.

*Public consultation
response for
European mobile
operator*

Analysys Mason helped to put together a sound and thorough response to the public consultation documents published by the regulator of a European country on Market 15.

*Market definition
and analysis
methodology
assistance for
ANRT*

Analysys Mason has been mandated by ANRT, the Moroccan regulator, to recommend a list of telecommunications markets identified as relevant (i.e. which may be subject to ex ante regulation) and the methodology (guidelines) to conduct market analyses on these relevant markets. This project included a benchmark of regulatory frameworks in force in Europe, and in several countries in the region, as well as a review of local market conditions in the fixed, mobile, Internet and leased lines markets. On the basis of international best practices, but also of the specificities of the local market, we recommended a list of relevant markets and guidelines for the analysis of these markets. This project has enabled the Regulator to initiate the review of its regulatory and legislative framework to better manage issues related to competition in the telecoms markets.

Market analysis of the telecoms/ICT sector for BTA

We were commissioned by the Botswana Telecommunications Authority (BTA) to conduct a detailed and comprehensive market study across all sectors and make recommendations for future regulatory intervention. We gathered a large amount of data from primary meetings with all operators and ISPs in the market as well as secondary sources and prepared a detailed report on each sector, including defining and assessing competition in each carefully defined market (following the EU framework). We made recommendations in key areas such as the licensing of future telecommunications operators and potential price regulation of existing operators. Our report assisted the regulator to examine the effectiveness of past policy and to formulate future policy.

Market review for an African mobile operator

For an African mobile operator, we performed a market review of all available mobile services. This review was intended to prove to the regulator that its decisions regarding the competitiveness of the mobile market and the remedies applied to operators with SMP were not in line with best practice. While working with a law firm, we first defined the different markets related to mobile services. We then analysed the markets and identified the level of competitiveness within each market and finally, when operators were found to have SMP, we proposed appropriate and justified remedies. Our client used our report in order to support its position in front of the regulator, the Ministry of telecommunications and the Government

Assistance against regulatory dominance proceedings

Analysys Mason assisted a major fixed and mobile incumbent operator in a Middle Eastern country with two regulatory proceedings related to significant market power (SMP, dominance) and sector review (further market opening). For the SMP proceeding, we researched remedies applied in comparable markets, in particular those relating to retail price control. We assisted the operator in developing case study materials for a replicability test based on real tariffs in the country, to assist with the dialogue with the Regulator. For the sector review proceeding, we submitted a detailed quantitative analysis of the sector in the country in question, benchmarking it against countries of comparable size and development stage. We analysed and commented upon the barriers to entry, as well as on the viability of entry to the various specific product markets. We also recommended the styles of market entry most likely to lead to increased quality of service and levels of investment in the country

Broadband market assessment over the regulator's market analysis

For the incumbent operator in a South-East European country, we provided an assessment of the broadband market analysis carried out by the national regulatory authority and the remedies proposed in the markets for wholesale unbundled access and wholesale broadband access. The objective of our work was to provide the incumbent with arguments to lighten the regulation proposed by the regulator. The project included a review of the regulator's draft decision, an exercise to benchmark regulation of European broadband markets on topics such as the regulation of NGA and the definition of sub-national relevant product markets, as well as a review of the financial remedies. We also reviewed the models prepared by the regulator to cost the wholesale products. We produced a lobbying paper that was sent to the EC, and contributed to the operator's response to the national consultation process. As a conclusion of this engagement, the regulator revised its remedies in favour of our client, taking into account some of Analysys Mason's comments.

Advice to IDA on the applicability of European market-by-market regulatory framework to the local industry

For the IDA, the Singapore regulator, we performed a rigorous study of the applicability of the European market-by-market regulatory framework to the local telecoms industry. As well as providing recommendations on whether the local regulatory regime should change, the project involved defining all the relevant markets in the local industry, and assessing the level of competition in each. This project drew on our extensive and detailed knowledge of the European regulatory framework, gained from our long experience working with European regulators, as well as our detailed understanding of the country's environment.

Regulatory assistance to the IDA

For the IDA, we provided regulatory assistance to analyse the dominance of an incumbent operator in the market for international telephony and their application for exemption. In particular, we performed the following tasks: (a) developing an economic framework for the definition of markets and the analysis of competition in the market for national and international leased lines; (b) interviewing operators responding to a public consultation process.

Assisted an operator in its response to a consultation from the regulator on retail and wholesale broadband markets

Assistance to a cable operator in the Caribbean region in its response to a consultation from the regulator related to the analysis of the retail and wholesale broadband markets. The regulator aimed at imposing stringent ex-ante obligations on our client. We analysed the regulatory framework, reviewed the regulator's argumentation, provided our client with techno-economic analysis and benchmarks in order to prepare a well-argued and convincing response. Our work helped our client demonstrate the lack of proportionality and justification of the regulator's assessment, which led the regulator to revise its analysis and to impose more favourable regulatory obligations on our client.

