Communications Regulatory Authority
State of Qatar
هيئة تنظيم الاتصالات
دولة قطر

Notice

of the

Standards, Methodology and Analysis to be applied in the Review of Market Definition and Dominance Designation and for Ex Post Competition Policy Investigations in the Telecommunication Sector in Qatar

October 21, 2015

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1. Background and Introduction

In June 2014 the Communications Regulatory Authority of the State of Qatar (**the Authority**) published a consultation[1] where it proposed its review of the "Notice of the Standards, Methodology and Analysis to be applied in the draft Review of Market Definition and Dominance Designation (**MDDD**) in the Telecommunication Sector in Qatar"[2] for the market definition, including the assessment of the markets susceptible for ex ante regulation. This Notice updates the version originally published on 31 October 2011.

The Authority has since consulted on the first stage of its latest MDDD[3] and its Statement of ex post Competition Policy[4]. In light of these consultations, this Notice describes the standards, methodology and analysis the Authority will use in defining Relevant Markets determining market power. This analytical framework will be used in both MDDD and for Ex Post Competition Policy Investigations.

The framework set out in this Notice is derived from the Telecommunications Law, the Executive By-Law, the previous standards, international best practice and analysis applied in the MDDD process of 2011.

1.1 Legislative background

The Authority's approach for the MDDD and Ex Post Competition Policy Investigations is created in accordance with the relevant requirements of the legal framework. Specifically, this relates to the 2006 Telecommunications Law and the 2009 Telecommunications By-Law.

MDDD

The MDDD is the process and instrument through which the Authority identifies any Service Providers who have a dominant position in a relevant market and imposes ex ante regulatory remedies on that Service Provider in that market.

Decree Law 34 of 2006 on the promulgation of the Telecommunications Law and the Telecommunications Law (**Telecommunications Law**) explicitly provides for the designation of Service Providers as Dominant in Articles 19.5, 27, 23, 40 and 42. Article 40(3) of the Telecommunications Law provides for the Authority to determine the criteria that must be applied in the designation of SPs as having Significant Market Power (**SMP**)[5], or being a Designated Service Provider (**DSP**) (i.e. designated as dominant) in identified telecommunications markets and implementing such criteria in any designation process.

Article 42 of the Telecommunications Law provides a legislative framework for undertaking the designation process, determining the extent of significant market power or dominance in a market, stating what any Notice and Orders in this regard must

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1 CRA(2014) Market Definition Review of the list of the Relevant Markets Communications Regulatory Authority "CRA"
Draft for Consultation http://www.ictqatar.qa/en/documents/document/review-list-relevant-markets-public-consultation-document

2

3 Market Definition and Dominance Designation in Qatar - Market definition and review of Candidate Markets
Draft for Consultation

4 Draft Competition Policy 20 May 2015.

5 The terms Significant Market Power and dominance are interchangeable for the purposes of this assessment.

specify, including the relevant products and services markets, the standards, methodology and circumstances relied upon, and the methodology for market power designation.

Article 42 also states that the Authority may consult with Service Providers or customers or any other interested parties in the course of undertaking the determination of any market, analysis or market power designation in accordance with the provisions of this article.

Ex Post Competition Policy Investigations

Ex post competition policy investigations include the investigation of conduct (whether anti-competitive agreements and practices, or abuse of a dominant position) which could be considered to prevent or substantially lessen competition, and the assessment of proposed mergers on competition in relevant markets.

The Telecommunications Law and Telecommunications by-Law contain a number of specific prohibitions and obligations in relation to competition in the telecommunications sector.

- Article 43 of the Telecommunications Law (2006) and Article 75 of the Telecommunications By-Law (2009) sets out the scope of conduct which is prohibited as an abuse of a dominant position Article 43 of the Telecommunications Law (2006) and Article 75 of the Telecommunications By-Law (2009);
- Article 45 of the Telecommunications law prohibits any “person” from engaging in any practices that prevent or substantially lessen competition.
- Article 47 of the 2006 Telecommunications Law provides information on the obligations of parties to a merger or transfer of control.

The Methodology for defining markets and assessing dominance in MDDD and ex post investigations

The 2009 Telecommunications By-Law provides further details on the “standards and methodology” to be applied in the assessment of dominance. Article 72 specifies that:

“*The methodology may include the following elements and any other relevant factors which will be applied in accordance with criteria set out in third paragraph of this Article:*

(1) definition of the relevant telecommunications market or markets in terms of products and geographic scope.

(2) assessment of market power based on a review of the economic and behavioural characteristics of the relevant market and an examination of the extent to which a Service Provider, acting alone or jointly with others, is in a position to behave independently of customers or competitors.”

Article 73 of the 2009 Telecommunications By-Law provides further information on the data used to guide the assessment:

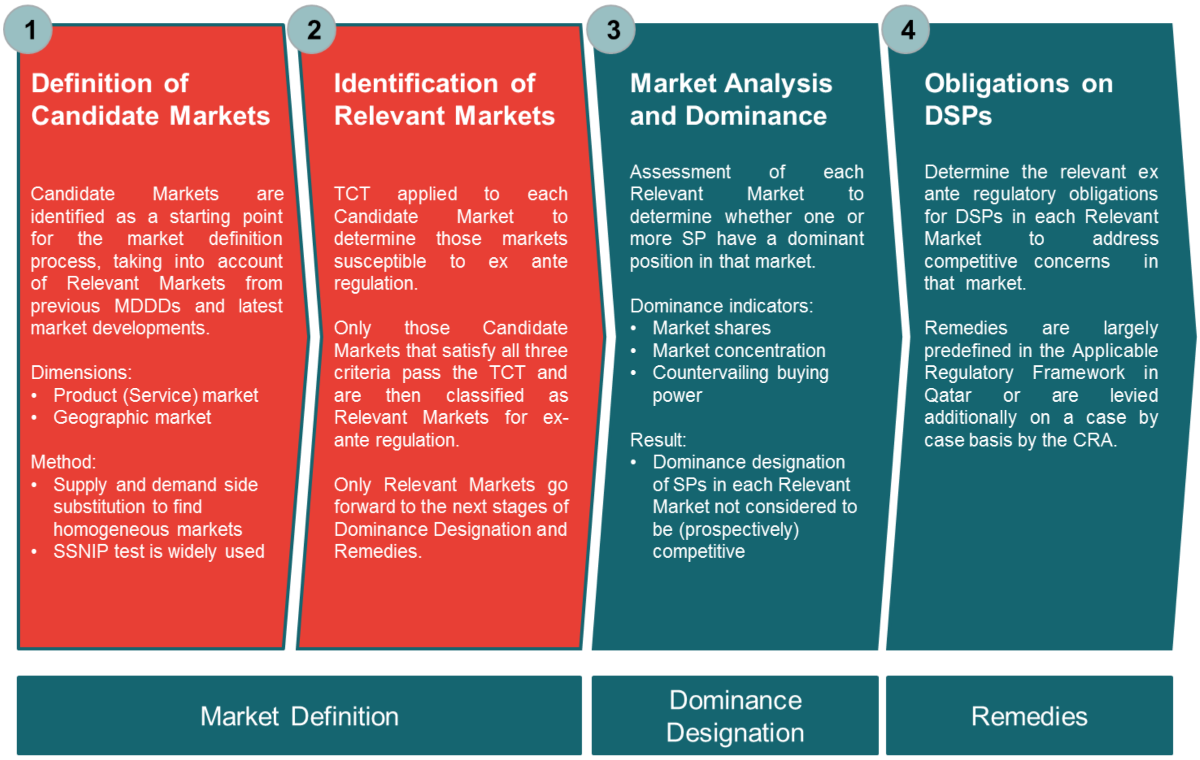
“*the General Secretariat shall rely on the best data available to it, and all market participants shall cooperate fully in furnishing information requested by the General Secretariat in order to carry out its evaluation. Where true, complete and accurate data is not available, the assessment may be based on reasonable estimates, proxies and regulatory actions in comparable jurisdictions in the region.*”

Article 73 has therefore identified that the market definition should consider the product and geographic dimensions; and that market definition should be assessed using the best available data, including reasonable equivalents where the preferred data is not available.

2. The approach for MDDD and ex post competition investigation in Qatar

<u>MDDD approach</u>

The overall approach for the MDDD process in Qatar follows the process described in



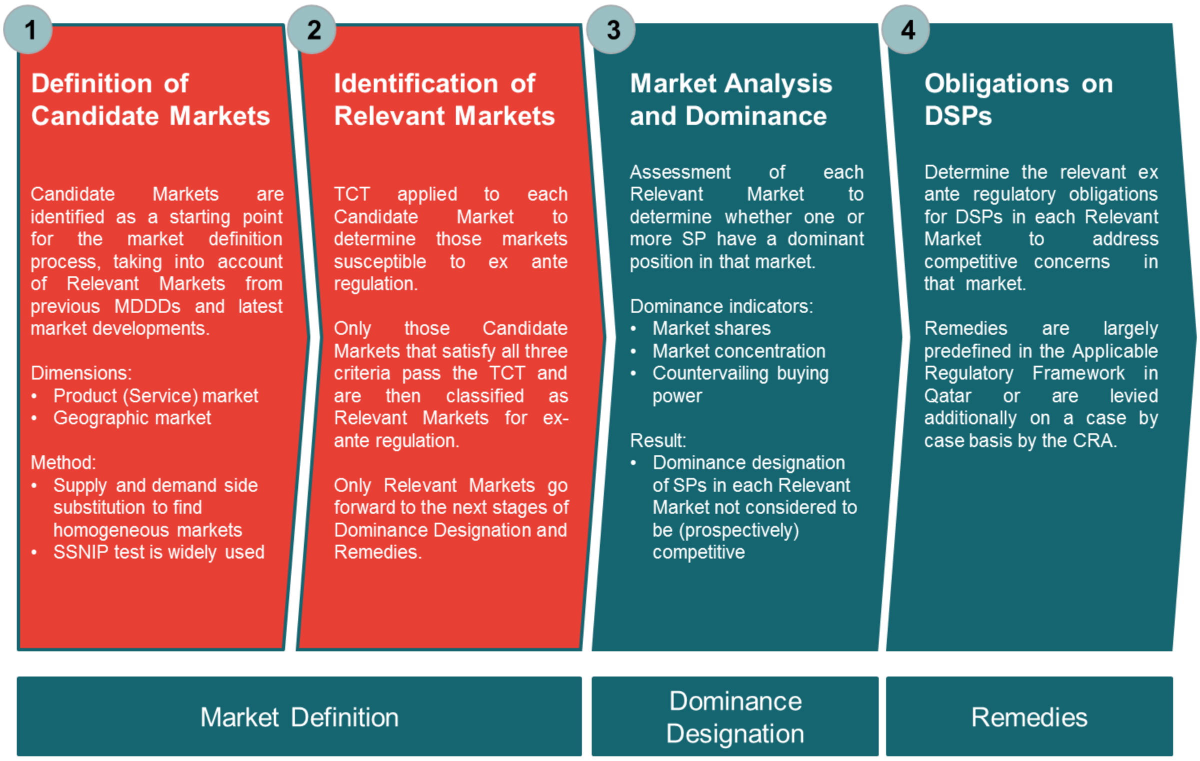


Figure 1 below. The steps of the process comprise (1) the definition of Candidate Markets, (2) identification of Relevant Markets, (3) Market Analysis and Dominance Designation and (4) Obligations on DSPs. A summary of the approach is illustrated in the Figure below, and is followed by further details on the four stages.

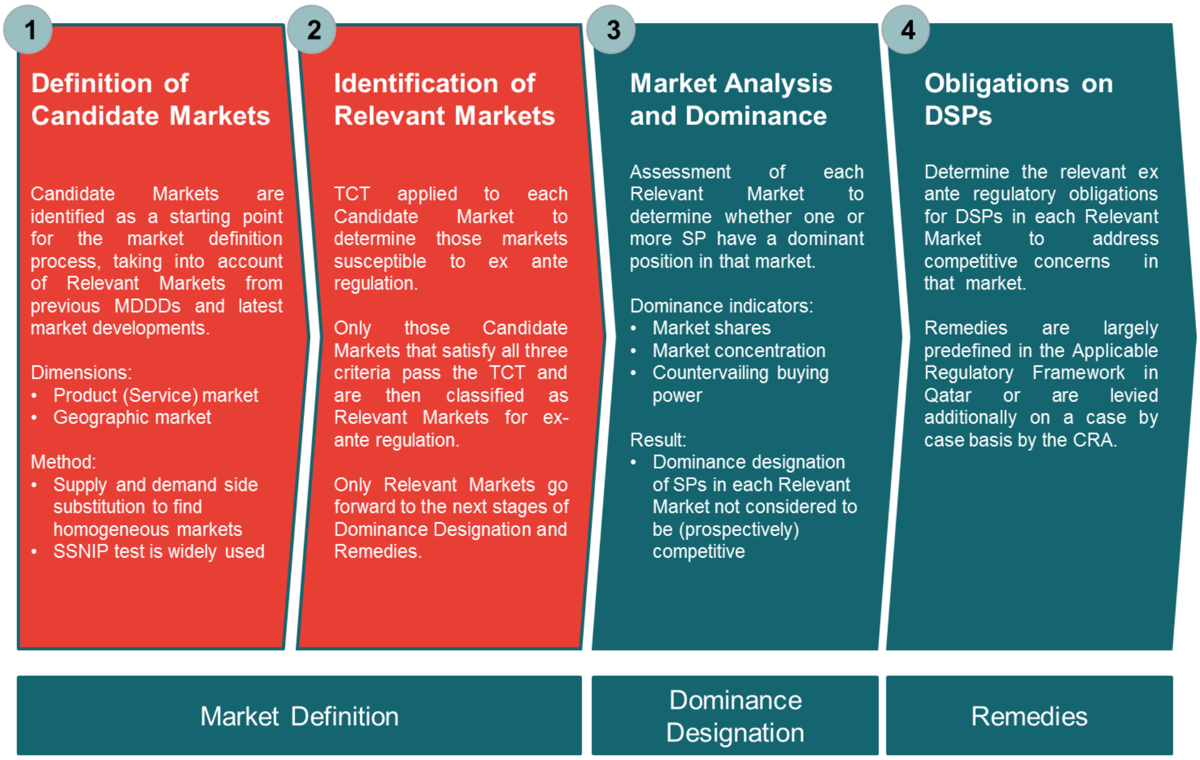


Figure 1: MDDD - generic process

Step 1: Identification of Candidate Markets

The first step in the MDDD approach is to identify a set of Candidate Markets. This stage is where all service and geographic markets are defined, regardless of whether they would end up being susceptible to ex ante regulation.

The definition of Candidate Markets starts off from looking at the previously defined markets in Qatar, and draws from international best practice, recent market developments in Qatar and broader technological developments to determine which services and geographic areas form part of the same economic market.

This process begins with identifying a narrowly defined focal service. The market for providing this service is then widened to all demand and supply-side substitutes which a hypothetical monopolist would need to control before it could profitably raise prices by a small and significant non-transitory amount. The approach identifies retail and wholesale markets, while recognising that wholesale markets are derived from the retail markets. Two key dimensions are considered during the process:

1) the relevant product dimension (also regarded as a service market in the telecommunications context), and
2) the relevant geographical dimension of each relevant product market.

The aim of this exercise is to identify economic markets within which conditions are homogeneous. That is, to identify the products in the market and the geography over which supply and demand-side competitive constraints are similar.

The approach also considers whether services offered to different customer segments form part of the same economic market. In some circumstances, competitive constraints between these two customer segments vary substantially. On the demand-side, there may be strong differences between the requirements of residential and business customers, or differences in their demand elasticity (i.e., their willingness to pay for the same product is noticeably different). On the supply-side, differences can mean that one segment of customers has more competitors offering services than the other segment has.

Step 2: Identification of Relevant Markets

Each of the Candidate Market identified under Step 1 is then subject to the Three Criteria Test (**TCT**) in order to determine whether that market should be classified as a Relevant Market susceptible to ex ante regulation. In order to be a Relevant Market, each Candidate Market must exhibit the following three characteristics:

1) There must be high and non-transitory barriers to entering the market;
2) The structure of the market must be such that the market does not tend towards effective competition within the relevant time horizon; and
3) Competition law / policy alone must be insufficient to adequately address the market failure(s) concerned.

Each of the three criteria is assessed separately, and all of them have to be met for the Candidate Market to pass the test. A Candidate Market which passes the test then becomes a Relevant Market, with all Relevant Markets being considered in the Market Review and Dominance Assessment and Remedy Design stages of the MDDD. All remaining Candidate Markets are considered (prospectively) competitive and will not be considered further in the MDDD process.

Applying the TCT in the Qatari context aims to focus ex ante regulation on the economic markets where it is necessary, and avoid unnecessary ex ante regulation (where barriers to entry are low, and there is a tendency to competition) , and ex post regulation can be used. That is, applying the TCT should ensure that remedies can be aimed at fundamental bottlenecks.

In applying the TCT the Authority will consider the evidence on each criterion and on balance across all three criteria, to assess whether the Candidate Market is susceptible to ex ante regulation.

When applying the TCT to retail markets it may be relevant to consider whether access regulation in wholesale markets affects competition in retail markets such that retail ex ante regulation could be withdrawn. Where the Authority finds that barriers to entry are high or market is unlikely to tend towards competition, the Authority will then in addition consider whether existing ex ante wholesale remedies are sufficient to mitigate the concerns such that the retail market is not susceptible to further ex ante regulation.

Where a Candidate Market is considered susceptible to ex ante regulation the Authority will go on to make an assessment of dominance in that market. Where the Authority finds that a firm is dominant, then the Authority (consistent with its regulatory duties) may impose remedies on that firm. Below each of the three criteria underlying the TCT is discussed in more detail.

<u>Criterion 1: High and non-transitory barriers to entry or expansion</u>

The first criterion measures how easy it is for competitors to enter the market and/or for existing providers to expand their offerings. Barriers to entry are usually assessed through a modified Greenfield approach, meaning that they are assessed under a hypothetical scenario in which no ex ante regulation is already in place. Indicators include:

- Existence of sunk costs such as sunk costs incurred building a telecoms network;
- Control of infrastructure that cannot be easily duplicated, for example because it is not economically profitable to replicate an incumbent's network or there are other barriers such as licencing barriers;
- Technological advantages or superiority;
- Easy or privileged access to capital or financial resources;
- Economics of scale and / or economics of scope which create significant barriers to entry;
- Vertical integration, particularly where a vertically integrated supplier controls an important upstream input;
- Barriers to develop distribution and sales network; and
- Products or services diversification.

Criterion 2: No tendency towards effective competition

The second criterion measures whether the market under consideration would tend towards effective competition, again, without regulation being in place. Indicators include:

- Current and historic market shares;
- Price trends and pricing behaviour;
- Control of infrastructure that cannot easily be duplicated;
- Products or services diversification (e.g. bundles products or services where the use of bundles can restrict consumer choice for example);
- Barriers to expansion; and
- Potential competition.

Criterion 3: Insufficient competition law

The third criterion measures whether existing (ex post) competition law is sufficient to address any potential anti-competitive practice in the market under consideration. Indicators include:

- Degree of generalisation of non-competitive behaviour;
- Degree of difficulty to address non-competitive behaviour;
- Whether anti-competitive behaviour brings about irreparable damage in related or connected markets; and
- Need for regulatory intervention to ensure the development of effective competition in the long run.

Step 3: Market Analysis and Dominance Designation:

Service Providers can be designated as unilaterally dominant, or collectively dominant. The approach taken for assessing unilateral or collective dominance is set out in section 3.

The Telecommunications Law explicitly provides for the designation of a DSP in Articles 19.5, 23, 27, 40, and 42, and for specific legal obligations to be imposed on DSPs including those relating to competition policy such as, but not limited to, Articles 41, 43, 44, and 46; interconnection and access such as Articles 18, 19, 23, 24, and 25; and tariffs such as Articles 27, 28, 29, 31, 32, and 33. Dominance is additionally dealt with in the Executive By-Law in Chapter 8[6]. Additionally, the Licenses of Ooredoo and Vodafone contain DSP obligations.

According to Article 72(2) of the Executive By-Law, the MDDD process continues with the analysis of the defined Relevant Markets in a quantitative and qualitative respect to determine whether dominance exists in such Relevant Markets. The Authority analyses the extent to which a SP, acting alone or jointly with others, is in a position to behave to an appreciable extent independently of customers or competitors. Thus, Step 3 finally results in the designation of a DSP in one or more Relevant Markets or may also produce the result that no DSP in one or more Relevant Markets is designated.

The definition of relevant markets constitutes a prerequisite for any dominance analysis but does not in itself automatically involve any anticipation on single or collective dominance. Section 4 of this Notice provides a generic description of methods and criteria used in dominance assessment.

Step (4): Obligations of a DSP:

The obligations of a DSP are set out in the regulatory framework (RF)[7] and either apply automatically or are imposed by the Authority as required. Most of the obligations affecting DSPs and non-DSPs are largely pre-defined in the RF[8].

Ex Post Competition Policy Investigation approach

The Authority's approach to assessing market definition and market power in this Notice (which relate to investigation of ex post conduct) is consistent with the approach taken in ex ante reviews (for example as part of the MDDD).

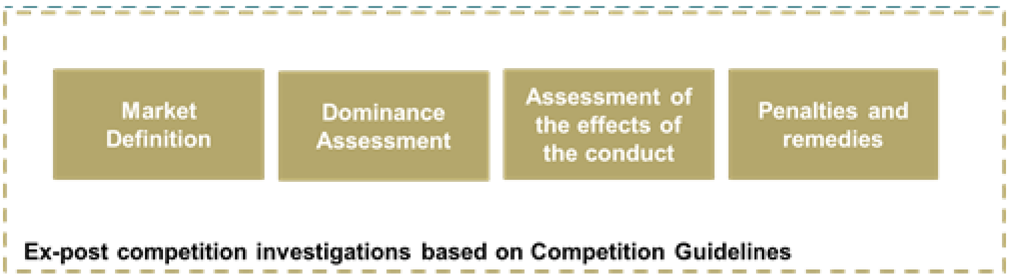


Figure 2: Ex post competition investigation – generic approach

Step (1) Market definition:

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6 This definition of SMP in the Telecommunication's Executive By-Law is in practice identical to the contents of the Telecommunications Law. In the By-Law, there is a slight clarification to the definition of SMP where it is stated that SMP will also be defined in accordance with the provisions of chapter nine of the Telecommunications Law along with Chapter eight of the Executive By-Law.

7 The ARF comprises the relevant legal provisions in Qatar, inter alia but not limited to the Telecommunications Law, the Telecommunications Executive By-Law, the Licenses of the SP and any related regulations, rules, orders, notices, decisions, directions and instructions issued by the Authority.

8 The list of obligation is also enumerated in the Consultation Document, Annex I Obligations of DSPs.

The first step in an Ex Post Competition Policy Investigation into conduct which may amount to an abuse of dominance or other anti-competitive behaviour is to define the relevant markets. Once a market is defined the Authority can undertake the relevant analysis to investigate the conduct under consideration.

Ex post market definitions will consider markets which have been affected by alleged anti-competitive behaviour. These require backward-looking market definitions based on the markets as they were at the time of the alleged anti-competitive behaviour.

This is different to the procedure for an ex ante assessment, in which market definitions are forward-looking and used to determine dominance now and over a future period of time. Ex ante market definition is also not centred on a focal product, as it looks to gain a more holistic view of market definitions in the communications sector.

An ex post competition investigation will therefore not require the identification of Candidate Markets, and could instead consider the markets relating to:

- the markets where the product(s) which are the subject of the conduct are supplied; and / or,
- other markets where the investigated firm is present; and / or
- the markets where the effects of the conduct are felt.

Step (2) Dominance Assessment:

The assessment of dominance is a key step in determining whether certain conduct amounted to an abuse of a dominant position. Such a position of economic strength can be realised by either a single firm, in which case it is classified as single firm dominance; or by a group of Service Providers, in which case it is classified as collective dominance.

The dominance assessment for an ex post investigation may not necessarily correspond precisely to a dominance assessment made for ex ante purposes. One reason for this is the different temporal perspectives of each assessment. An ex post assessment is backward looking based on what has occurred. In effect, this examines whether a Service Provider is dominant at a given point in time. On the other hand, an ex ante assessment is forward looking based on what is expected to occur.

Step (3) Assessment of the effects of the conduct:

The Authority will assess whether conduct infringes the Competition Policy (whether as an agreement or concerted practice which prevents or substantially lessens competition, or as an abuse of a dominant position). The assessment will consider the actual effects on competition against a counterfactual of what would have happened, absent the agreement, concerted practice, or other conduct under investigation.

Step (4) Remedies:

Upon completion of an investigation, the Authority may require any remedy including:

- a behavioural remedy such as requiring the Respondent to cease the identified offending/non-compliant behaviour or take whatever action is necessary to avoid or remedy any harm caused or likely to be caused by such behaviour;
- a structural remedy which could involve, for example, separating distinct operational functions of the service provider(s) or requiring it to divest particular assets.

- other remedies, which may include but are not limited to, requiring the infringing party to publically acknowledge the Authority's decision; issuing a warning to the relevant service provider(s); or referring the matter to the public prosecutor.

The Authority may accept binding commitments from the Respondent in appropriate circumstances. Details of such commitments shall be included as part of the relevant determination made by the Authority and shared with the Complainant.

Where the Authority considers that there is a risk of significant and irreparable harm the Authority may impose interim remedies.

3. Market Definition – Analytical framework

This section describes the methodology underlying the Market Definition process. It first outlines the basic principle of the methodology in section 3.1 and then focuses on the main dimensions of market definition in sections 3.2 to 3.6.

3.1 Defining a Market

Once the Candidate Markets in terms of products and geographic scope are established, following a consultation process and discussions with market entities about the proposed Candidate Markets, the Authority defines the Relevant Markets. The underlying methodology of market delineation is based on the RF and economic principles in accordance with competition law principles as set out in Article 72 of the Executive By-Law.

A market is defined using the Hypothetical Monopolist Test (**HMT**). This is the accepted global standard, and also part of the telecommunications framework[9]. Although direct empirical implementation is often limited in practice, the methodological framework serves as an important conceptual guideline.

The test begins by describing a Hypothetical Monopolist (**HM)**, which currently and in future only offers one product/service within a defined area. The HMT seeks to identify the narrowest possible market on a product layer. The HMT assumes the monopolist imposes a Small but Significant and Non-transitory increase in Price **(SSNIP)**, which is usually approximated as 5-10%.[10] Assuming that the prices of all other products remain constant, the question is whether customers can react adequately by switching to other products without having to accept huge efforts and costs; and whether other suppliers can profitably switch to supplying that product without having to accept huge efforts and costs (SSNIP Test). If so, then the HM does not have sufficient market power to raise price (as it is constrained by demand or supply side switching). As a consequence, the next closest substitute is added to the initial (set of) product(s) and the HMT is applied again until the point is reached where a HM could profitably impose a price increase. The temporal element for market definition should reflect the periodicity and the forward-looking nature of the overall market analyses process. Typically, the profitability of a SSNIP is considered over a time period of approximately one year. Competitive

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[9] This approach to market definition was introduced by the US Department of Justice (1982 Merger Guidelines, revised in 1992, 1997 and recently in 2010) and is currently being used by regulatory and antitrust authorities worldwide.

[10] The US Department of Justice refers to a 5% increase whereas the EU SMP-Guidelines (§ 40) refer to a 5-10% increase in price.

constraints which occur over a longer period (for example two to three years) are typically considered in the market power assessment.

The Candidate Market or relevant market includes all those potential substitute products which provide a significant competitive constraint on the initial products. When examining the competitive responses, it is not necessary that all consumers (or) producers are willing to switch, but only that enough of them would switch in response to the price increase in order to discipline the HM sufficiently.

Since direct empirical implementation of the HMT is mostly limited, the conceptual understanding of the factors influencing the outcome of the HMT receives a specific emphasis. In principle, the HMT should guide the analysis of market definition alongside all relevant dimensions, which are described below.

Relevant Markets are identified based on a range of factors aimed at determining the scope of products and services that are reasonable substitutes for one another and, therefore, constitute a discrete market for the purposes of market and competition analysis. This includes defining the Relevant product/service[11] markets and their geographic scope. The Authority defines product markets in particular in terms of supply and demand side substitutability.

References to geographical market delineation, relevant wholesale markets and on fixed-to-mobile substitution are described below.

3.2 Demand side substitution

Demand side substitution takes place when consumers prefer to switch from one product to another in response to a change (usually 5 to 10%) in the price of the product. When the HM raises the price, some customers will reduce consumption or will choose not to purchase at all and drop out of the market.

Demand side substitutability is determined by the extent to which customers of the relevant product under consideration would consider other (similar) products as an acceptable substitute. The closer the similarities from the consumer’s viewpoint, the more consumers will switch to the other products. If consumers can switch to available substitute products or use the same products from suppliers located in other areas, then it is unlikely that price increases will be profitable for the HM.

The following elements determine the extent of demand side substitutability:

- Substitutes available at similar prices,
- price-elasticity of consumers;
- Overall importance of good for consumers;
- Transactions-/switching costs for consumers (demand side barriers);
- Durability of the good; and
- Regulatory environment.

[11] Within the MDDD Process the terms "product” and "service" have the same meaning.

3.3 Supply side substitution

Competitive forces stemming from supply side substitution are a vital element in market definition. Some firms, already producing a similar product, might alter their production facilities and supply sufficiently homogeneous substitute products to consumers remaining in or re-entering a market.

From the consumers' perspective, it does not make a difference if potential substitutes pre-existed (prior to the initial price increase) or if they were supplied by firms operating near to the initial market in response to the initial price increase. An economic market is therefore defined by consumer preferences and technology. Hence, supply side substitution might lead to broader market definitions including products that are at first not deemed to be interchangeable by consumers. In telecommunications markets this observation is an important one, since an isolated demand analysis could produce unreasonable and even meaningless results in many circumstances. Furthermore, not considering supply side substitution at the market definition stage might create an irreversible distortion. For instance, a finding of a significantly high market share (e.g. above 50%) due to a 'too narrow' market definition would usually be associated with a presumption of dominance, which is unlikely to be broken at the stage of competition analysis.

Effective supply side substitution must be technologically feasible and economically viable, involving no additional investments with significant sunk cost within a relatively short period of time (typically up to two years). Supply side substitution is determined by both firms already in the market and potential new firms entering the market. Possession of assets allows redeploying these without incurring significant (sunk) costs. Obviously, this requirement is not restricted to the production (wholesale) level but applies likewise to the retail level, since supply side substitution would be ineffective if producers were not able to market their "substitute" products to consumers. Supply side substitution will only be an effective constraint if consumers also regard the "potential" supply side substitute as sufficiently equivalent in light of the initial (set of) products, i.e. supply and demand side substitution have to interact. If producers in adjacent markets are incentivised to offer products which are sufficiently similar to the focal products within a short period of time, then the market can be widened to include suppliers producing the similar products in the adjacent markets,.

3.4 Relevant Geographic Markets

In terms of geographic demand and supply side substitution in telecommunications, supply side substitution possibilities are more relevant than demand substitution possibilities. In markets where services depend on a fixed connection, as in most telecommunications markets, it seems very unlikely that a customer in a certain area would substitute supplies from outside the area in reaction to a price increase by a hypothetical monopolist in the area, unless he changes the location of consumption to a place outside the area. As the choice of residence of a certain customer is driven (if at all) only marginally by the price of telecommunications services this scenario does not seem to provide an effective demand side constraint on the HM.

Contrary to this, it is possible that geographic supply side substitution will take place in response to a price increase by the HM. However, in the absence of access regulation, entry in a telecommunications market in a certain area is only possible through rolling out infrastructure to that area. Only if this investment is non-significant and can be realised within a short period this would it provide an effective supply side constraint on the hypothetical monopolist. If, on the other hand, homes were already connected with alternative infrastructure, a price increase could well be constrained due to demand and supply side substitution> This would though be considered as product specific substitution (as opposed to geographical substitution).

With regard to the geographic market definition in Qatari telecommunication sector, the Authority analyses two main criteria:

- the area covered by a network; and
- the existence of legal and other regulatory instruments.

This approach is also in line with the SMP Guidelines of the EU framework on the assessment of substitution in different areas.

3.5 Wholesale markets

The Market Definition methodology outlined above applies equally to retail and wholesale markets. With respect to the latter, however, there are some specific methodological aspects that have to be considered in addition.

The scope of a wholesale market is, in addition to demand and supply side substitution at the wholesale level, also determined by demand and supply side substitution at the retail level, whenever different wholesale providers are linked to one another through retail markets.

The main difference between wholesale and retail markets is that wholesale products can belong to the same market, even in the absence of direct supply and demand side substitution on this wholesale level, as the downstream (retail) level sees the wholesale inputs as sufficient substitutes. The impact of the restrictions via the retail level on the wholesale market definition will in general be stronger the larger the demand elasticity at the retail level is, the more of a wholesale price change is passed on to the retail level and the larger the ratio of wholesale and retail price. This concept has then to be applied to the question of under which circumstances internal sales should be included into the Relevant wholesale Market.

3.6 Fixed-mobile substitution (FMS)

In many countries the mobile sector is increasingly exerting competitive pressure on fixed voice telephony markets as well as on broadband services. Fixed-mobile substitution (**FMS**) is mainly characterised by an opposing development of volumes in both sectors. In the mobile sector we can observe persistent growth in penetration levels and call minutes whereas fixed access lines and usage have been decreasing steadily for some years in OECD countries.[12] As market data and empirical evidence indicate that FMS differs in regard to different market segments, specific focus needs to be put on the various market segments. Therefore, the extent of FMS will constitute a relevant dimension in future market delineation processes.

[12] OECD – (2009), "Communications Outlook 2009", available at: http://www.oecd.org/-document/44/0,3343,en_2649_34225_43435308_1_1_1_1,00.html, figures 1.1, 3.2 and 3.6.

However, according to prevailing experience in Qatari markets as well as with international experience, FMS has not yet materialised to an extent, which would generally allow the definition of common fixed and mobile markets[13,14]

3.7 Assessing markets with bundles

Products sold as bundles can be relevant in a number of ways when defining markets. For example in assessing the competitive constraints imposed by different products or services, it may be necessary to consider whether a product sold as a bundle constrains how consumers would respond to a price rise (for example if they are more resistant to switching if they bought bundled products).

Furthermore, if the competitive conditions of each of the elements of a bundle are similar then it may be practical and proportionate to define the market around the bundle rather than each element of the bundle.

4. Market Analysis and Dominance Designation and assessment of SMP – Analytical framework

As illustrated in

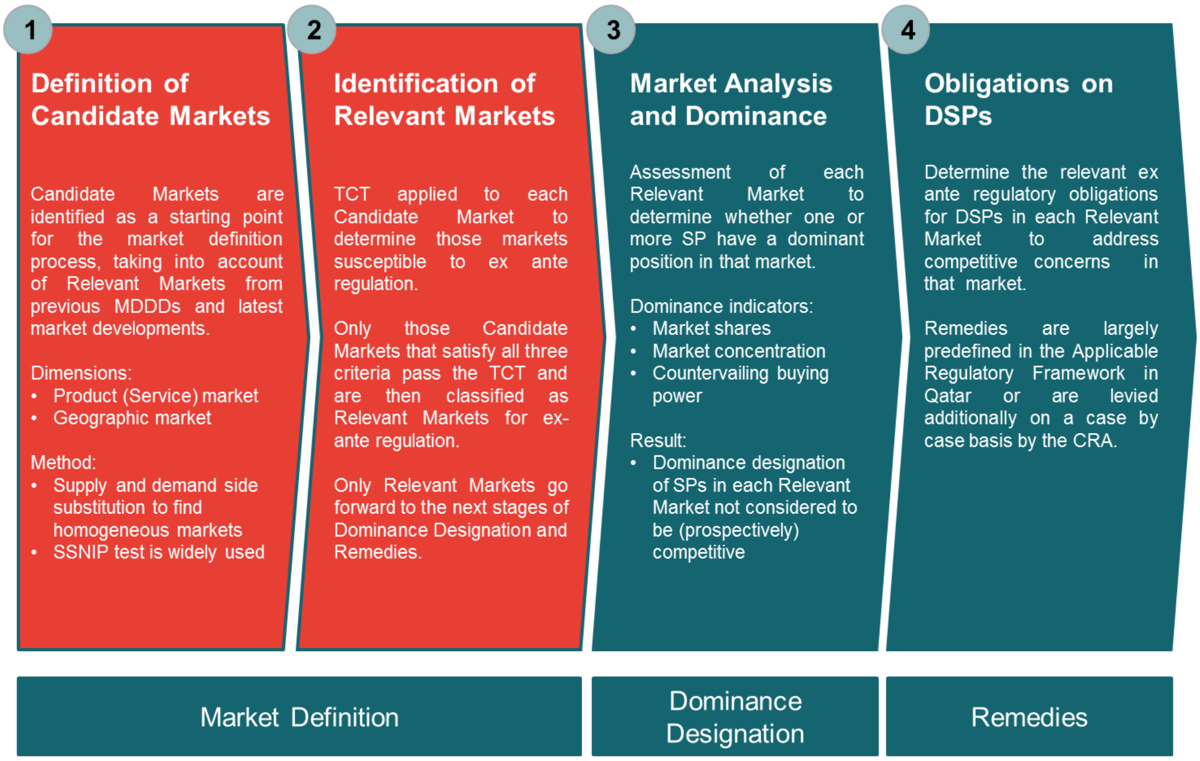

Figure 1, the Authority conducts the Market Analysis and Dominance Designation for each Relevant Market. The assessment of dominance and market power for the purposes of the Ex Post Competition Policy Investigation is the same as for the MDDD, except where such differences are described in Section 2, above. This section describes the underlying legal foundation as well as definitions of essential competition concepts.

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[13] Vogelsang, I. (2010), "The relationship between mobile and fixed-line communications: A survey", in: Information Economics and Policy, Vol. 22, 4-17.
[14] The Economist, January 1st 2011, "Hanging up".

Section 4.1 sets out the relevant competition criteria for designation of single or collective dominance. Section 4.2 contains some remarks on evaluating competition criteria which will always need to be weighed on a case-to-case basis by the Authority.

The Telecommunications Law defines SMP as

> *"the strong economic position of a service provider in the market that permits it to act independently of customers or competitors, or to dominate a market or markets related to specific telecommunications services, through acting either individually or jointly with others in accordance with the provisions of chapter 9 of this law".*

The definition in the Executive By-Law is practically identical to the definition in the Telecommunications Law[15]. These definitions contain core features of "acting independently", which are very similar to the definition used in the European SMP Guidelines "behave … independently":

> *"… the operator has and will have, on the relevant market identified, sufficient market power to behave to an appreciable extent independently of competitors, customers, and ultimately consumers…".*[16]

Concerning this firm specific definition, the European SMP Guidelines[17] (§112) overall make an inseparable connection between effective competition (at the market level) and – in legal terms – SMP (or, economically, individual market power at the firm level):

> *"…the notion of effective competition means that there is no undertaking with dominance on the relevant market. In other words, a finding that a relevant market is effectively competitive is, in effect, a determination that there is neither single nor joint dominance on that market. Conversely, a finding that a relevant market is not effectively competitive is a determination that there is single or joint dominance on that market."*

The EU SMP Guidelines also list similar criteria taken from the decision making practice of European courts and the European Commission which are to be taken into particular consideration when evaluating Dominance (SMP Guidelines § 78 for "single dominance", § 97 for "collective (joint) dominance").[18] A finding that a Relevant Market is effectively competitive is a determination that there is neither single nor collective dominance in that market. From this, it follows that The Authority as an output from the MDDD review may decide that there is a DSP, collective dominance (two or more DSPs) or there is no DSP on a particular Relevant Market.

[15] The only difference is the wording "position of economic strength" instead of "strong economic position".

[16] European Commission (2002), "Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services (2002/C 165/03)", SMP Guidelines, § 30, Brussels, available at: http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52002XC0711(02) .

[17] ibid

[18] See European Commission (2002) "Commission Guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and service"; 2002/C 165/03 and Article 72 Executive By-Law.

Concerning market definition and evaluation of market power, the Qatari Telecommunications Law and its Executive By-Law follow commonly used international competition law principles and are in line with best international practise.

4.1 Criteria used to assess dominance

In determining whether dominance exists or not in a Relevant Market, The Authority analyses the extent to which a SP, acting alone or jointly with others, is in a position to behave to an appreciable extent independently of customers or competitors. This is international best practise for determining whether market power exists in a particular (product or service) Relevant Market and whether a SP is enjoying a Dominant Position (or having Significant Market Power) in this Relevant Market.

In order to assess dominance, it is necessary to determine the extent of market power in the Relevant Markets by evaluating the circumstances prevailing in the sector, including market information and evidence of past customer and supplier behaviour.

The criteria for the assessment of dominance are set out in the Qatari Telecommunications Law in Chapter 9 and its Executive By-Law in Chapter 8.

Based on the Article 72 of the Executive By-Law criteria, the Authority may apply the following criteria to assess if a SP is a DSP on the Relevant Market:

- market share of a SP;
- absolute and relative size of a SP in the Relevant Market;
- degree of control of facilities and infrastructure that would be uneconomical for another SP to develop to provide services in the Relevant Market;
- SPs economies of scope and scale;
- absence of countervailing buyer power in the Relevant Market, including customer churn characteristics;
- structural and strategic barriers to market entry and market expansion; and
- any other factors relevant to evaluating the existence of market power in a particular market.

The main criteria used by The Authority to measure market share is revenue. Additionally, the number of subscribers, lines, minutes and other relevant indicators may be used to support the evaluation of market share or to analyse the size of the firm.

Based on the Article 72 of the Executive By-Law The Authority may deem, in the absence of evidence to the contrary, that an individual SP with a share of more than 40 percent of the Relevant Market is a DSP

SPs may also be deemed to be collectively dominant. Collective dominance refers to two or more independent economic entities who are united by economic links which mean that they adopt the same conduct on the markets via tacit collusion or tacit coordination. This implies that jointly they are able to behave independently of customers or rivals.

Collective dominance could arise where a market satisfies a number of appropriate characteristics, in particular in terms of market concentration, transparency and other characteristics such as: it being a mature market, there being stagnant or moderate growth on the demand side, low elasticity of demand, similar cost structures and market shares, high barriers to entry, lack of countervailing buying power, lack of potential competition, various kind of informal or other links between the undertakings, or clear retaliatory mechanisms available to the SPs[19].

Once a SP is designated as a DSP in a certain Relevant Market, the SP is obliged to comply with specific obligations, as set out in the regulatory framework.

4.2 Evaluation of criteria used to assess single firm dominance

Article 72 of the Executive By-Law further states that the methodology may also provide guidance on the parameters that will be used for measuring market share. Articles 73 to 76 of the Executive By-Law complete the legal and regulatory provisions regarding the procedure of market definition and analysis, as well as the assessment of dominance.

The competition situation in individual markets and the specific relevance and importance of various competition indicators must always be assessed on a case-by-case basis. Ultimately, the overall empirical material available is to be interpreted and weighed on the basis of experiential knowledge (i.e. data), as well as economic theory. The Authority will assign priority to certain competition indicators in light of individual market conditions. Accordingly, Article 72 of the Executive By-Law assigns specific importance to the role of market share, in as much as in the absence of evidence to the contrary, this indicator may deem that an individual SP with a share of more than 40 percent of the Relevant Market is a DSP. Furthermore, with reference to international case law and best practice, large market shares, i.e. in excess of 50%, provide a rebuttable presumption of evidence of the existence of a dominant position.[20]

Both value sales and volume sales provide useful information but sales in value and their associated market share will usually be considered to better reflect the relative position and strength of each SP[21].

From an economic point of view, the level of market share might be a necessary condition for dominance since the potential for contestability is rather of theoretical relevance in communications[22] and thus retains high relevance in any dominance analysis. Market share analysis will, if applicable and reasonable, be complemented by basic forms of distribution figures and concentration ratios (such as Hirschman-Herfindahl Index (**HHI)**; absolute and relative firm size). Nevertheless, an HHI calculation is not always an appropriate tool as in a two player market this result will always be above 5,000 and thus a clear indication for a lack of competition in the market. Basic market share analysis will therefore always involve an assessment of the number of operators active in the market as well as their distribution and relative market

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[19] See European Commission (2002), "Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services (2002/C 165/03)", §97, Brussels.

[20] See European Commission (2002), "Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services", §75, Brussels, and Case 85/76 Hoffmann-La Roche v Commission, [1979] ECR 461, §§ 39-68.

[21] Commission Notice on the Definition of Relevant Market for the Purposes of Community Competition Law OJ [1997] C 372/5

[22] For an extensive critique see Martin, S. (2000), "The Theory of Contestable Markets", Purdue University, retrieved from: http://www.mgmt.purdue.edu/faculty/smartin/aie2/contestbk.pdf. For a communications specific application see Briglauer, W., Reichinger, K. (2008), "Chances of Contestability in Communications – A Sector-Specific Application", in: Intereconomics, Vol. 1, 51-64.

importance. Also, market shares have to be assessed against the backdrop of respective market barriers since this allows identifying competition within the market as well as potential competition outside the Relevant Market. Only if market shares come along with some non-negligible market barriers can they be seen as indicative as a source of market power from an economic point of view.

Additionally, the number of SPs in a specific market in itself does not give a clear indication with respect to the status of competition. Indeed, it is possible that a two player market with 50 % market share for each SP may have "better" competitive characteristics than a market with a larger number of players. But, the mere pointthat a second operator has entered a arket and this per se guarantees competition is not sufficient, in The Authority's view, to determine that market to be competitive.

According to the above, market share cannot always be seen as a sufficient indicator in isolation (the same holds a fortiori for other indicators, such as the number of operators or barriers to entry). The simplicity of traditional market share analysis (based on critical threshold values) disappears; the more markets deviate from static and monopolistic structures towards dynamic market structures. With the future intensification of competition, developments such as price competition, quality of service, facilitated switching of customers between different Service Providers by effective number portability, etc. will be more important than the market share per se.

The evaluation of the other criteria may cover the analysis of the following:

- absolute and relative size of the SP in the Relevant Market – this criterion refers to the advantages that may arise from the large size of an undertaking relative to its competitors;
- degree of control of facilities and infrastructure that would be uneconomical for another SP to develop and to provide services in the Relevant Market – this criterion analyses if the SP has control of a large network that a competitor would find costly, economically inefficient and time-consuming to build. This advantage can be a barrier to potential new market entry;
- SP economies of scope and scale – economies of scale arise when increasing production causes average costs to fall. Economies of scope exist where average costs for one product are lower as a result of it being produced jointly with another product. Economies of scope and scale can be a barrier to entry for other SPs;
- absence of countervailing buyer power, including customer churn characteristics – the existence of customers with a strong negotiating position may restrict the ability of the SP to act independently of their customers;
- current and potential competitive constraints – analyses the possibility of new competitors entering the market within the 2-3 years timeframe and potential constrains existing on the market;
- structural and strategic barriers to market entry and market expansion – the threat of potential competitor entry may prevent the DSP from raising prices above competitive levels. If the market faces significant barriers to entry, this threat may be weak or absent.

Potential criteria for the assessment of dominance and of effective competition, respectively, have various levels of relevance in various markets. The Authority may use the most appropriate criteria for a particular Relevant Market under consideration.

The need to apply the framework of analysis in its full depth will vary from market to market and the intensity of competition on those markets. Also, not all of the criteria have to be fulfilled simultaneously to find a position of dominance and a DSP. As outlined above, market shares could serve as a key indicator in a number of cases and in the absence of other compelling evidence they are in itself conclusive to designate a SP as having a dominant position.

4.3 Evaluation of criteria used to assess collective dominance

Collective dominance generally refers to the joint market power of two or more Service Providers in a market. A collectively dominant group of Service Providers would together have sufficient market power to tacitly coordinate conduct.

Coordination involves the alignment of conduct in order to reach an optimal strategy. Such a strategy often has the aim of foreclosing competition and/or increasing profits. Tacit coordination is when coordination is achieved without an explicit agreement between the involved Service Providers to adopt the same behaviour. It can be initiated through leadership, where one Service Provider behaves in a certain manner and the other adopts the same behaviour. It can be maintained using a leadership strategy or through simultaneous decision-making, which uses past conduct to anchor the coordination strategy.

Examples of common conduct which could be achieved by collectively Dominant Service Providers include tacit price collusion and collective refusal to provide wholesale access to competing retail service providers.

A variety of conditions relating to internal and external stability facilitate collective dominance, and some of these are more difficult to sustain over time. The Authority will consider whether these conditions are present and how they holistically contribute to the potential for collective dominance.

Internal stability, which refers to the lack of incentives for the Service Providers to deviate from the common conduct being undertaken, is an important consideration for achieving collective dominance. The Authority identifies three key features relating to internal stability:

- transparency, in order to establish the common conduct and observe deviations from it;
- symmetry, in order to facilitate the use of a common strategy. Service providers which naturally have similar strategies and are subject to the same cost fluctuations are better able to coordinate conduct; and
- credible punishment, in order to ensure that there is a negative outcome from deviating which reduces the incentive to do so. The Authority would assess the potential forms of punishment that could be used, and how practical they would be to implement.

External stability, which refers to the presence of constraints that restrict competition from outside the current suppliers, also facilitates collective dominance. The Authority identifies two important market features which can influence external stability.

- High barriers to entry, in order to ensure benefits from common anti-competitive behaviour are not limited by competition from new entrants. Higher barriers to entry would be expected to increase the external stability of the market and therefore provide conditions more conducive to tacit coordination.

- No countervailing buyer power, in order to enable the common conduct to have the desired outcome through the suppliers' market power. Countervailing buyer power could reduce the benefits that can be gained from coordinating because it acts to offset the ability of any collectively DSPs to behave in an anti-competitive manner.