Annex I

COMPETITION POLICY: SOME BASIC CONCEPTS

A. Defining a market

Market definition is a key issue in competition policy and analysis. In order to establish whether a firm has a dominant position in a particular market, or whether a restrictive agreement among firms reduces competition, it is necessary to first define that market.

There are two main aspects to defining a market – the product market and the geographic market.

- The product market

A widely accepted approach to defining a market is to identify and include close substitutes for a particular product or service. An analysis would start from the assumption that there is a monopolist in a particular market. An assessment would then have to be made as to whether the hypothetical monopolist could permanently increase prices by a small but significant amount. If consumers would switch to alternative products or services in sufficient numbers to render the price increase unprofitable, then the additional products and services would be included in the definition of the market. The analysis would then be repeated until the boundaries are set by the fact that a price increase would be profitable for the reason that it would not lead to further substitution.

- The geographic market

In some markets, for example, in the telecommunications industry, geography plays an important role in defining the market for local access. Again, markets can be defined by assessing substitutability in response to product or service price changes. The aim this time though would be the extent to which spatial proximity of rival suppliers can impose competitive constraints on a firm or firms in an area. Network industries are often defined by the product (or service), and the area of coverage or geography.

B. Barriers to entry

The evaluation of competitive markets and market behaviour often focuses on the extent to which one or more firms can sustain a price increase. It will be very difficult for established firms to sustain significant long-term price increases if it is easy for a new firm to enter a market and provide a substitute product or service. On the other hand, the existence of barriers to market entry will limit such market responses.

There are many types of barrier to entry in different markets, including:

- Significant economies of scale whereby a large-scale established firm has lower unit costs than a small-scale new entrant;
Government restrictions such as monopoly franchises or restrictive licensing practices;

High fixed and capital costs;

Intellectual property rights, such as copyright and patent protection.

Many markets are subject to multiple barriers to entry in that there may be high fixed costs, economies of scale and restrictive licensing practices. Local area telecommunications, gas and electricity supply, are all examples of such markets. In addition, a dominant firm may construct additional barriers to entry for new firms, such as refusing to connect networks or charging a premium for inter-network connectivity in the cellphone industry.

C. Market power and dominance

In practice, most of the concerns of competition authorities and of those regulators that promote competitive markets is focused on established firms that possess market power. In perfectly competitive markets, firms do not possess market power and so they cannot raise their prices above market levels without losing customers and profitability. Therefore, market power is generally defined as the ability of a firm to independently raise prices without losing sufficient sales to make the action unprofitable.

The main factors which determine the extent of a firm’s market power, include:

- **Market share** - this can be measured in terms of monetary value, sales volume, output or production capacity. On its own, market share is not sufficient to define a firm’s market power. However, firms that do not possess a significant share of a market are unlikely to be able to act anti-competitively on an independent basis;

- **Barriers to market entry** - if potential new entrants into a market are deterred by the costs of establishing a truly competitive operation then the existing firms have a degree of market power;

- **Pricing behaviour** – an absence of true price rivalry and the existence of price leadership are both consistent with the existence of market power;

- **Profitability** – the prevalence of excess profits on a sustained basis is indicative of the absence of true price competition and the presence of market power;

- **Vertical integration** – vertically integrated firms may be able to exert market power, in the form of price or quantity controls, in either upstream or downstream activity.

“Significant market power” is a concept used in analysing the competitiveness of an industry, particularly in Europe. The European Commissioner (EC), until recently, used a 25 per cent market share as the threshold for significant market power. Further,
EC policy directives in respect of certain network industries, such as telecommunications, required firms with significant market power to provide network access to other suppliers.

“Market dominance” is a more extreme form of market power and is generally regarded as existing where a firm has a market share of more than 35 per cent and significant barriers to entry by new firms exist.

D. Essential facilities

The concept of “essential facilities” is central to the development and implementation of competition policy. Essential facilities generally possess the following characteristics, in that they are:

- Supplied on a monopoly basis or are subject to monopoly control, for example, railway networks;
- Required by competitors in order to compete, for example, interconnecting operators in telecommunication systems;
- Difficult, or impossible, to duplicate by competitors for technical or economic reasons, for example local telephone network access lines.

A public utility that controls an essential facility often has both the incentive and the means to limit access to the facility by competitors. It is, therefore, a matter of public interest to ensure that essential facilities are available to competitors on reasonable terms. Without such access, competition will suffer and the sector will operate less efficiently than it could.

Examples of essential facilities proliferate in the network industries. In gas and electricity provision, the means of distribution and supply to end-users are often regarded as essential facilities. It would be very expensive and wasteful to have a multiplicity of networks in a particular locality. Similarly, it is more efficient to have a variety of internet service providers, international telephone service operators, and other telecommunication service providers use the same telephone network access lines in a local area than have each construct their own access infrastructure. The identification and definition of essential facilities is an important element in the implementation of competition policy and will depend on the particular characteristics of the product and geography of the market under consideration. Clearly too wide a definition will lead to wasteful competition and, possibly, inadequate provision of essential facilities. On the other hand, too narrow a definition will prevent or limit potentially desirable competition in the provision of network components.

E. Types of competition

It is normal, particularly when examining possible competition in public utilities, to distinguish between “natural monopoly” and “potentially competitive” activities. This distinction usually relates to output competition and this generally focuses on two dimensions: the definition of the output and the time period. Output is often difficult to define, particularly for sectors served by public utilities. In the electricity industry, output is defined in terms of production and transmission, or supply and distribution. Billing,
customer services, and the bulk purchase of electricity is potentially competitive, as is the activity of generation. The ‘wires’ or network activity, high voltage transmission and low voltage distribution, however, are natural monopolies. The operation of the market, known as “pooling and dispatch” are also generally regarded as monopolies, but some believe that they can become potentially competitive through decentralized trading. Similar classifications can be made in most network industries when assessing the infrastructure provided and services offered. The second form of output competition, the time period, arises in contract markets and between vertically integrated firms. Economic theory suggests that the term structure of contracts will be determined by the cost characteristics and asset lives of upstream activities. Again, the electricity industry provides a good example of this since virtually all new entrants to power generation will only build power stations based on 10-15 year supply contracts with distributors.

Such time-period distinctions matter in designing policies to promote competition. Regulators have considerable control over the structure of contracts with final customers. Risks cannot be satisfactorily assigned downstream if customers are inhibited in entering into long-term contracts. This will influence the structure and amount of upstream investment.

Competition can also be applied to inputs. The usual mechanism is competitive tendering, whereby the utility is required to test its production costs against those of other firms in the market. Competitive tendering is often used for the provision of natural monopoly activities, for example, in the water industry, and also as a mechanism for overcoming informational asymmetries between utilities and regulators when prices are set at periodic reviews.

Franchise competition is a variant on the concept of input competition. Since most utilities operate under licences, these can be granted for a fixed period under a system of competitive bidding. The competition in this case is for a monopoly right and, in theory, bidding should transfer the potential monopoly rent to consumers or government. Such franchise competition has been used extensively in railway privatization, particularly in the United Kingdom, where train-operating companies are required to provide a minimum standard of service, and then bid for the right to a seven-year monopoly. Where subsidies are involved, the franchising bidding system is usually aimed at minimizing the financial burden on the government.

The capital market can provide a final form of competition. With capital market competition, different sets of owners and managers take over the assets and licences of utilities and, with a price cap, attempt to reduce costs to maximize profits. In practice, such competition has been limited by the retention of golden shares by government and concerns about mergers and acquisitions by such privatized firms.

These various types of competition, output, input, franchises and capital market within a range of time scales, provide the context for the design of competition policy and strategy.

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