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## Public monopolies, concessions, and competition law and policies

Study by the UNCTAD secretariat

### *Executive summary*

Infrastructure concessions have been promoted as a means of changing inefficient market structures, improving efficiency and relieving the public budget. Concessions were expected to contribute to economic development and consumer welfare. However, developing countries and economies in transition have had mixed experiences with concessions. Against this background, the present paper analyses concessions from a competition policy perspective. It examines the extent to which this type of contract has the potential to contribute to economic development and what steps need to be taken in order to make this happen. Members' responses to the questionnaire from the UNCTAD secretariat served as a basis for the paper. The paper begins by setting out the function and rationale for concessions. Next, different options for the regulatory framework are described. Some effects of concessions on economic development are presented. Ways to stimulate competition are addressed, including in a concession's design, award and performance. The role of the competition authority is reviewed. The paper concludes by asking how country experiences can improve concessions.

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## Introduction

1. Many developing countries undertook economic reforms in the 1980s to establish well-functioning market economies to further development. Greater scope for competition among private actors provides greater incentives for efficiency gains. Investing in and adopting new technologies and practices contributes to economic development and increases the welfare of the population. One part of these reforms was to introduce competition into sectors formerly dominated by public monopolies. Besides classic privatizations, i.e. the transfer of ownership in state-owned companies or public assets to the private sector, public-private partnerships were promoted both in developing and developed countries, as a means to allow the public sector to benefit from the know-how, experience and financial strength of private companies. Concessions – a particular form of public-private partnership – were frequently granted for the provision of infrastructure services and the operation of public assets.

2. However, concessions did not always meet expectations. In fact, in most developing and transition countries, experiences with concessions were mixed,<sup>1</sup> and many are today regarded as failures.<sup>2</sup> Consequently, in a number of Latin American countries – where the experience has been studied in depth – the provision of some concessioned services has been transferred back to state-owned companies. On the other hand, the experience with other concessions has been successful.

3. Few draw the conclusion from these mixed experiences that a market-based economy characterized by competition is not the right solution for economic problems in developing countries. More often, the failure of concessions is attributed to the way they were undertaken, and much effort has been made to better understand the reasons why they did not produce the desired results.

4. This paper analyses concessions from a competition law and policy perspective. It examines the extent to which this type of contract has the potential to contribute to economic development, and what steps need to be taken in order to make this happen.

## I. Concessions and development

### A. Definition

5. Full privatization of public enterprises is not always feasible for political or legal reasons.<sup>3</sup> In such situations, concessions can be used to get private enterprises to deliver public services, often using public property.

6. When used in this paper, the term “concession” has the following meaning:

A grant to a private firm of the right to operate a defined infrastructure service and to receive revenues deriving from it. The concessionaire generally takes possession of the relevant public assets (but ownership usually remains with the government) and uses them to provide the relevant product or service according to the terms of the contract.<sup>4</sup>

<sup>1</sup> Compare the replies of Argentina, Malawi and Chile to the UNCTAD questionnaire.

<sup>2</sup> Social Watch (2003); Estache A et al. (2007), page 22.

<sup>3</sup> World Bank (1995a).

<sup>4</sup> OECD (2007).

7. Concessions often place many of the operational and financial risks on the concessionaire. Building and operating large infrastructure projects such as a port, airport or toll road are typical examples where concessions may be used. Often, the private investor either partly or entirely finances the infrastructure, which the concession will entitle him to use and collect fees from subsequently. Alternatively, the concessionaire may take over the operation of existing infrastructure. Subsequent regulation also determines risk allocation among the concessionaire, government and consumers.

8. As illustrated in the table below, concessions were the predominant legal form for foreign direct investment in the infrastructure industries of developing and transition countries from 1996 to 2006.

Table 1

**Main legal forms of foreign direct investment commitments in the infrastructure industries of developing and transition economies, by industry, 1996–2006.**

Sector	Legal form of foreign direct investment in infrastructure industries (Based on the number of projects, in per cent)			
	Concessions	Privatization FDI	Greenfield FDI	Management and lease contracts
Transport	86	7	1	6
Water	70	5	0	25
Energy	62	26	10	2
Telecommunications	16	16	67	1
All infrastructure	62	16	16	6

*Source:* UNCTAD secretariat calculations, based on data from the World Bank's Private Participation in Infrastructure (PPI) database. See UNCTAD (2008), page 107.

9. Apart from infrastructure services, the right to use natural resources may also constitute the subject matter of concessions. Concessions are the predominant form for the participation of transnational companies in metal mining in developing countries.<sup>5</sup> However, concessions do not play the same role in the oil and gas industries, since most petroleum production after the nationalizations of the 1950s–1970s was by state-owned companies.<sup>6</sup> Furthermore, production-sharing agreements, rather than concessions, are the predominant contractual form for private participation in oil and gas production.<sup>7,8</sup>

10. Competition issues in infrastructure concessions differ from those in concessions to exploit natural resources. Markets have different geographic scopes: the market for infrastructure services is local or regional in scope, whereas commodities markets are mostly worldwide. Consequently, the effect on supply of infrastructure concessions is felt locally, whereas the effect of natural resources concessions is felt locally only if the commodities in question are also used in the local economy and competition from abroad is ineffective. Further, infrastructure services often constitute natural monopolies, that is to

<sup>5</sup> UNCTAD (2007b), pages 161, 125.

<sup>6</sup> UNCTAD (2007b), page 125.

<sup>7</sup> UNCTAD (2007b), page 104.

<sup>8</sup> Production-sharing agreements allocate risks differently from concessions. UNCTAD (2007b), page 160.

say, situations in which output is produced more cheaply by a single firm.<sup>9</sup> Given these differences, this paper focuses on infrastructure concessions. However, where appropriate, reference is also made to concessions in the extractive sectors.

11. In some legal systems, the term “concession” is also used for an administrative permission to engage in a certain type of business that needs specific control by the state, e.g. the retail sale of alcoholic beverages in Finland.<sup>10</sup> This type of concession is not covered by the present paper.

## **B. Rationales for granting a concession**

### **1. To change inefficient market structures**

12. In industries that are characterized by public monopolies and state failure, concessions may be granted to put an end to an inefficient market structure. Multiple concessions may promote entry by competing private operators, as has occurred in several telecommunications markets. Multiple concessions may need to be accompanied by mechanisms to ensure effective access to the infrastructure, as well as, perhaps, incentives to duplicate some infrastructure. These may allow the market structure to evolve in a competitive direction.

13. By contrast, a single concession to operate existing infrastructure may merely transform a public monopoly into a private monopoly. However, even if the infrastructure is a natural monopoly, it may be exposed to competition. An example may be a toll highway that is paralleled by another highway.

14. If the industry is a natural monopoly, then promoting competition may not promote productive efficiency, but instead result in inefficiently small firms.<sup>11</sup> However, where supply to each region is a natural monopoly, it may be better to have several adjacent natural monopolies than one unified natural monopoly, to make it easier to regulate them.

### **2. To increase the efficiency of operators**

15. Concessions are often granted because a private operator is expected to run the business more cost-efficiently than the state. As market players driven by profit objectives, private undertakings are considered to be more experienced in realizing cost efficiencies, improving services, and innovating. Some studies show that private enterprises in developing countries have, on average, delivered better performance and been more likely to undertake required investments than public entities.<sup>12</sup> If cost-efficiencies are passed on and service coverage is broadened, consumers and enterprises benefit. And concessions contribute to a country’s economic development and consumer welfare. There is, however, an inherent risk that the private operator will neither pass on cost efficiencies nor widen

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<sup>9</sup> Natural monopoly is an economic phenomenon. It contrasts with statutory monopoly, where the right to exclude rivals from the market is derived from the law. Where natural monopoly exists, productive efficiency may be harmed in conditions of competition.

<sup>10</sup> Finland’s reply to the UNCTAD questionnaire.

<sup>11</sup> However, two or more competitors, even in a natural monopoly, may be more efficient if the natural monopoly supplier would otherwise be highly inefficient.

<sup>12</sup> Guasch JL (2004), page 1. Sri Lanka replied to the UNCTAD questionnaire that it had had positive experiences with concessions in the petroleum industry. According to some authors, empirical evidence and theoretical debates do not support the assumption that the private sector would be more efficient than the public sector; see Hall D and Lobina E (2005).

coverage, in order to increase profits. The concession contract or regulation should normally address this, and also provide incentives for efficiency.

### 3. To relieve the public budget

16. Concessions may be granted to reduce government expenditures for infrastructure and maintenance. Where the private sector has easier access to finance than the public sector, or government cannot commit to a pattern of expenditures for infrastructure and maintenance, concessions may reduce financing costs and enable long-term commitments.

17. Developing countries significantly underinvest in infrastructure. The World Bank estimates that developing countries annually invest 3–4 per cent of GDP on infrastructure including maintenance, whereas 7–9 per cent is needed to achieve economic growth and poverty reduction goals.<sup>13</sup> Governments seek to fill the financing gap from official flows and domestic and foreign private investors.

18. Concessions do not necessarily eliminate the need for public expenditure. Providing infrastructure to users in remote areas or to poor users is frequently unprofitable, necessitating subsidies to serve them.

## C. Regulatory framework of concessions

### 1. Legislative Options

19. The legal framework for concessions may take a variety of forms. One option is to have a concessions law applicable to concessions in all industry sectors. Many Eastern European and Asian countries have general concession laws.<sup>14</sup> A second option is to have no specific law on concessions, but to introduce provisions governing concessions in other laws, such as the competition law, public procurement law, privatization law<sup>15</sup> or sector-specific regulations. The European Community, for example, has no specific comprehensive legislative framework for concessions. Some provisions govern specific types of concessions: for example, for works concessions,<sup>16</sup> the Community law on public procurement stipulates certain advertising. By contrast, the award of service concessions<sup>17</sup> is not regulated separately, but general principles of Community law apply – such as transparency, equality of treatment, proportionality and mutual recognition.<sup>18</sup>

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<sup>13</sup> UNCTAD (2008), page 92.

<sup>14</sup> According to EBRD (2005), p. 13, the following countries had a general concession law at that time: Lithuania, Bulgaria, Bosnia and Herzegovina, Macedonia, Moldova, Romania, Serbia and Montenegro, Ukraine, Slovakia, the Russian Federation, Albania, Croatia, Hungary, Kyrgyzstan, Latvia, Turkmenistan, Uzbekistan, Belarus, Georgia and Tajikistan.

<sup>15</sup> Malawi's reply to the UNCTAD questionnaire. In the Republic of Korea, the Act on Private Participation in Infrastructure sets the legal framework for concessions in the infrastructure sector; the Republic of Korea's reply to the questionnaire.

<sup>16</sup> European Community law defines works concessions as follows: "Public works concession' is a contract of the same type as a public works contract except for the fact that the consideration for the works to be carried out consists either solely in the right to exploit the work or in this right together with payment."; see Directive 2004/18/EC, Article 1 (3).

<sup>17</sup> European Community law defines service concessions as follows: "Service concession' is a contract of the same type as a public service contract except for the fact that the consideration for the provision of services consists either solely in the right to exploit the service or in this right together with payment."; see Directive 2004/18/EC of the European Parliament and of the Council of 31 March 2004 on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts, Article 1 (4).

<sup>18</sup> Commission of the European Communities (2004), para. 29, EC Interpretative Communication.

20. Mexico has included provisions on concessions in sector-specific regulations. For example, the Mexican Federal Law on Radio and Television<sup>19</sup> regulates concessions for the transmission of radio and television programmes. Similarly, the Federal Law on Roads, Bridges and Transportation<sup>20</sup> includes provisions on concessions for land transportation infrastructure.

21. In the absence of a specific concession law and of sector-specific provisions governing concessions, industrial policies may govern. Such is the case in Armenia.<sup>21</sup>

22. The 2005 Concession Assessment Project of the European Bank for Reconstruction and Development (EBRD) found that: “On average, countries that do not have a concession law ‘largely conform with internationally accepted principles of concessions laws’.”<sup>22</sup> There is a trend towards legislative frameworks for concessions. According to a study carried out in 2000 by the Organization for Economic Cooperation and Development (OECD), many countries – particularly transition economies – had developed laws on concession agreements in the preceding years.<sup>23</sup> At the European Union level, the benefits of a legislative initiative on concessions have been discussed.<sup>24</sup>

23. Core principles behind laws on concessions include promoting the fairness, transparency and accessibility of concession rules and procedures. These principles apply to the selection of concessionaires, the awarding of contracts and implementation. According to one set of recommendations, the law should “foresee a process which would guarantee a transparent and competitive selection process (including exceptions from competitive procedure), equal treatment of potential investors, the opportunity to challenge the rules and decisions of contracting authorities, and competitive rules for unsolicited proposals”.<sup>25</sup>

24. A concession law should ensure that competition is an important consideration throughout the concession process, from the design to the awarding to the implementation. The competition law should apply to concessionaires, and sector-specific laws may be necessary in order to ensure appropriate control over anti-competitive conduct. The relationship between contract terms and the competition law merits attention to ensure no inadvertent harm to competition.

## 2. Options for the legal nature of concessions

25. There are also different options as to the legal nature of concessions. These options can be illustrated by the mining law regimes in Latin America. Under these regimes,<sup>26</sup> concessions can be administrative, adjudicative or contractual. Administrative concessions are granted as a right or “mining title”, by way of a unilateral administrative act performed by a state body. This type of concession, which is applied in the majority of Latin American countries, for example, in Brazil, Mexico and Peru, has been criticized for its flexibility and because it tends to favour the mining authority. In adjudicative concession regimes, a

<sup>19</sup> Ley Federal de Radio y Televisión of 19 January 1960.

<sup>20</sup> Ley de Caminos, Puentes y Autotransportes of 22 December 1993.

<sup>21</sup> EBRD (2005), page 23.

<sup>22</sup> EBRD (2005), page 13. Note that four of the seven reviewed countries without concession laws joined the European Union in 2004 and thus were bound by other legal instruments.

<sup>23</sup> OECD Basic Elements of a Law on Concession Agreements, page 8.

<sup>24</sup> European Commission (2005).

<sup>25</sup> EBRD (2006), page 4. Indeed, various core principles have been established by a number of international organizations: UNCITRAL (2003); UNCITRAL (2000); EBRD (2006); OECD Basic Elements of a Law on Concession Agreements.

<sup>26</sup> World Bank (1995b); Sánchez-Albavera F and Lardé J (2006), page 24.

judicial officer is authorized to grant and extinguish mining rights, independently of any state mining interests. A system providing for adjudicative concessions requires a strong, independent judiciary. Contractual regimes use contracts to define mining rights and obligations, instead of including them in the mining law. This type of regime prevails in Colombia and Honduras. In the Bolivarian Republic of Venezuela, entrepreneurs involved in the mining sector contract with the Venezuelan Corporation of Guyana.

## **D. Implications of concessions for economic development**

### **1. Attraction of foreign direct investment**

26. By attracting foreign direct investment (FDI), concessions contribute to the economic development of a country. In the period 1996–2006, concessions were the main legal form of FDI in the infrastructure industries of developing and transition countries. Across all infrastructure sectors, 62 per cent of all FDI in developing and transition economies occurred under concessions, whereas FDI in the form of privatization and greenfield projects accounted for 16 per cent each. The remaining 6 per cent was realized through management and lease contracts.<sup>27</sup> Transport infrastructure had the highest share of FDI related to concessions, amounting to 86 per cent over the period from 1996 to 2006. This is followed by the water sector with 70 per cent, and the energy sector with 62 per cent. Only in the telecommunications sector did concessions not constitute the predominant legal form for FDI, with a share of only 16 per cent. Sixty-seven percent of the registered FDI projects in the mobile telephony sector were greenfield investment projects.<sup>28</sup>

27. As far as the extractive industries are concerned, concessions are the predominant form for the participation of transnational companies in metal mining in developing countries<sup>29</sup> and are therefore the main legal form of FDI. Although the extractive industries account only for a small share of global FDI flows,<sup>30</sup> the estimated stock of inward FDI in extractive industries in developing and transition countries rose by 50 per cent in the period 2000–2005.<sup>31</sup>

### **2. Contribution to more efficient market structures**

28. As has already been mentioned, the granting of concessions may be motivated by a desire to change inefficient market structures and promote private initiative and competition. But transferring the provision of goods and services to a private operator does not lead to competitive markets. Further measures are needed. A 1999 study of the telecommunications sector found that:

Competition is associated with increased mainline penetration, payphones, connection capacity, and lower prices for local calls. Privatization by itself, meanwhile, is significantly associated with an increase in payphone penetration, but no other benefits. Indeed, alone, privatization is correlated with decreases in mainline penetration and connection capacity. Privatization combined with the presence of a separate regulator, however, is associated with increased payphone penetration,

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<sup>27</sup> UNCTAD (2008), page 107.

<sup>28</sup> UNCTAD (2008), page 106.

<sup>29</sup> UNCTAD (2007b), page 161.

<sup>30</sup> UNCTAD (2007b), page 99.

<sup>31</sup> UNCTAD (2007b), page 102.



connection capacity and increased labour efficiency as measured by employees per main line. Regulation interacted with competition had no significant impact.<sup>32</sup>

29. One example of successful private-sector provision of services after market liberalization is the Jamaican telecommunications market.<sup>33</sup> After the state's shares in the incumbent telecommunications provider were transferred to a private operator between 1987 and 1989, the operator was granted exclusive licences for 25 years with an automatic right of renewal. However, after some years, the situation was deemed unsatisfactory; when, in 1999, there were 217,000 people on the waiting list for telephone service, and the growing demand for new telecommunications services was not being satisfied by the incumbent, the decision was taken to liberalize the telecommunications market. One of the first steps was to auction two mobile telecommunications licences. Other parts of the sector were liberalized in phases, starting in 2000. The success of this liberalization process is best illustrated by two statistics. The number of cellular lines in Jamaica increased from 118,000 in 1999 to 1.2 million in 2002, and annual investment in the telecommunications sector increased from J\$4.58 billion to J\$12.82 billion over the same period. In 2005, there were 1.98 million mobile lines, and major telecommunications companies reported annual investments of J\$10.4 billion.<sup>34</sup> In short, the competitively awarded licences, combined with market liberalization, have led to a situation in which consumer demand is being met and it is profitable for investors to meet that demand.

### 3. Improving an economy's infrastructure

30. Infrastructure improvements as a result of concessions play an important role in economic development: infrastructure services are critical inputs into the production and provision of goods and services, and significantly affect an economy's productivity, costs, and competitiveness.<sup>35</sup> Inventory behavior and logistics are good illustrations of this. Infrastructure levels and quality strongly determine how much inventory manufacturers maintain. Since inventories are costly, a higher level of inventory implies lower productivity or competitiveness. Likewise, logistics costs depend on the level and quality of infrastructure – especially that of roads, ports and telecommunications. Empirical studies have shown that better infrastructure improves the productivity of a country's economy.<sup>36</sup> In addition, the quality of infrastructure may even affect the social order and political stability if consumers express general dissatisfaction.<sup>37</sup>

31. The concession for the Autopista Central in Chile is a positive example<sup>38</sup> of improving transport infrastructure. At the beginning of this millennium, the Autopista Central needed to be rebuilt. The Autopista Central is a highway that connects Chile's largest cities where 78 per cent of Chile's industrial goods and 94 per cent of its agricultural outputs are produced. The rebuilding project was estimated to cost \$450 million and take six years, from 2001 to 2007. To enable the concessionaire to amortize the required investments, the concession was granted for 30 years. The tender specified certain

<sup>32</sup> Wallsten SJ (1999), pages 9–10. In its reply to the questionnaire, Nicaragua reported that productivity in the mobile telecommunications sector could be increased due to concessions, where the prices decreased for 50 per cent.

<sup>33</sup> Foga N and Newman D; Davis CE (2003).

<sup>34</sup> Jamaica, Office of Utilities Regulation (2007), pages 28, 33.

<sup>35</sup> UNCTAD (2007a), Part II, Commentaries on Chapters of the Model law and alternative approaches in existing legislation, page 56, paras. 134–142.

<sup>36</sup> Guasch JL (2004), pages 2–6.

<sup>37</sup> UNCTAD (2007a) Law, Part II, Commentaries on Chapters of the Model law and alternative approaches in existing legislation, page 56, para. 135.

<sup>38</sup> For further positive examples, see Chile's reply to the questionnaire, and also the United States' reply.

maximum rates.<sup>39</sup> The concession was awarded through a public tender open to national and international firms. A consortium made up of Chilean and international companies won the tender and proceeded with the required construction in a timely fashion. Today, the concessionaire's performance is judged positively.<sup>40</sup> The success of the Autopista Central concession is attributed to the institutions that managed the project being stable, technically competent and immune to political interference, as well as to the use of a competitive procedure to award the concession.

#### 4. Ensuring wider access

32. If wider access is a political objective, as it often is, then concession design must make it economically feasible.

33. Concessions can improve access to infrastructure services, as illustrated by the Jamaican telecommunications example. In that case, consumers benefited significantly from private-sector participation only after the market was opened to competition. A private operator facing neither competitive pressure nor effective regulation may not share efficiency gains with consumers or broaden access. In that case, extending service to poorer or more rural consumers was profitable at prices they could afford. Policy is more difficult in the opposite case. Access may even contract after concessioning: water concessionaires in Brazil increased prices to such levels that poor users could no longer afford to buy the water and instead switched to alternative sources of untreated water.<sup>41</sup> In cases where service at affordable prices is not profitable, there must be a funding mechanism. A subsidy from government funds, a fee on profitable services supplied by any operator in the sector or a hidden cross-subsidy from the concessionaire's profitable consumers are often sources. The last-named has the disadvantage of limiting competition to supply profitable customers, which is undesirable unless the service is a natural monopoly.

34. The large investment required to broaden coverage, combined with unrealistic tariff commitments, can lead to contract breakdown. In 1992, Buenos Aires granted a 30-year concession to supply the city with drinking water and sewage services. The award criteria were the lowest fixed water rates over the next 10 years and the promise to undertake the required investments. The concession was granted to a company that offered a 26.9 per cent reduction in water and sewage tariffs. However, once the concession was awarded, the company did not meet its contractual obligations for expansion, quality and tariff level. Several renegotiations took place, which were partly due the economic situation in Argentina and political circumstances. The government rescinded the concession in 2006, and today, water and sewage services in Buenos Aires are provided by a state-controlled company.<sup>42</sup>

35. In sum, concessions may help economic development in a number of ways. Firstly, they may attract foreign direct investment. Secondly, they may contribute to more efficient market structures, providing a way for new entrants to establish themselves. Thirdly, by improving efficiency in the provision of infrastructure services, they may improve the efficiency of all goods, services and commodities that use infrastructure as an input. And

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<sup>39</sup> In accordance with Article 1.14.1 of the public bid requirements, the concessionaire would be entitled to collect three types of maximum rates: (i) a maximum rate during non-peak hours, (ii) a maximum rate during peak hours, and (iii) a maximum rate for high traffic density outside of peak hours, see Autopista Central (2001), pages 64–65.

<sup>40</sup> Improvements could be realized with respect to road safety, emergency services, elements for pedestrian use, decontamination, car decongestion, see Skanska (2008), Gómez U (2005) and Borsdorf A and Hidalgo R (2005).

<sup>41</sup> Hall D and Lobina E (2003), page 30.

<sup>42</sup> Law 26.221 of 28 February 2007.

finally, they may broaden access to infrastructure services for otherwise excluded persons and firms, thus enabling them to increase their economic activity and further overall development.

## **E. The role of competition law and policies, and ways to stimulate competition**

36. Competition law and policies are necessary to ensure that the potential benefits of concessions are realized. Competition issues need to be taken into account at the various stages of a concession, including its design, the award process and its execution, as well as in the regulatory framework for the markets concerned.<sup>43</sup> Only if potential concessionaires have to compete against each other will they will be incentivized to offer more favorable conditions. But renegotiation can cancel the effect of competition at the award stage; it should be carefully circumscribed.

37. After the concession is awarded, potential anti-competitive conduct during the term of the concession should be constrained. In particular with respect to infrastructure services, concessions frequently confer a dominant market position. An infrastructure operator, whether public or private, has little incentive to lower prices or improve quality in such a situation. Competition law and policies, often combined with sector-specific regulation or concession contract terms, help to constrain anti-competitive conduct. Regulation and contract terms typically impose obligations with respect to quality, coverage and investments. Where competition in service provision is possible – as in mobile telephony – competitive pressure helps to maximize the benefits of private-sector participation in terms of investments undertaken, efficiency gains realized, quality and coverage of the services provided and the tariff level.

38. Weak competition is not the cause of some of the mixed experiences that developing and transition countries have had with concessions. For instance, asymmetric experience in negotiating concession contracts between major transnational companies and public officials may result in unbalanced concessions that are disadvantageous to the public. Another non-competition source of problems has been inadequate dispute resolution systems.

### **1. Design of the concession**

39. The design of a concession should allow for as much competition as possible. Therefore, it may be desirable to vertically or horizontally unbundle the activities that are the subject of the concession. Of course, the unbundling should not create undue inefficiencies: some activities are indeed natural monopolies, performed most efficiently when bundled together.

40. Horizontal unbundling to create competitors may be considered even in the case of infrastructure concessions. For example, if a concession to run a port is to be awarded, consideration should be given to separately concessioning each of the port's terminals and to designing the award process so that awards are made to different operators, in order to promote competition among them.<sup>44</sup> Such a horizontal split is often performed when granting concessions for mobile telecommunications services. Competition can be promoted by awarding licences for different frequency bands to different concessionaires. A natural monopoly, however, is most efficient if run by a single operator.

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<sup>43</sup> For an overview, see Brusick P (2008).

<sup>44</sup> Argentina's reply to the UNCTAD questionnaire.

41. Consideration should also be given to the vertical extent of a concession, that is to say, which upstream and downstream activities should be included. A major concern is to reduce the incentives or ability of a vertically integrated concessionaire to foreclose or discriminate against unintegrated rivals. These are competitors to the concessionaire, who need access to the services provided or infrastructure controlled by the concessionaire. It is possible that the concessionaire would wish to push these rivals out of the market, but efficiency or competition is better served if these rivals remain. In such circumstances, one solution may be to require the concessionaire to abandon the respective upstream or downstream activity; another solution may be to exclude vertically integrated companies from bidding for a concession.<sup>45</sup> Alternatively, joint or “club” ownership of the operator of essential facilities by the upstream or downstream users may reduce incentives to discriminate.

42. The *Zambian Mpulungu Port* case illustrates the competition issues that can arise when a vertically integrated concessionaire forecloses competitors from markets downstream from the concession activity. Mpulungu Port is Zambia’s only significant port on Lake Tanganyika in northern Zambia. It is Zambia’s principal exit for exports of cement, maize and other agricultural products to the Great Lakes region. In 2000, the Zambian Government granted a 25-year concession to a private operator to run the Mpulungu Port. This operator was also engaged in downstream activities as a user of the port. Subsequently, the concessionaire allegedly abused his position as exclusive port operator, by availing himself of discriminatory usage of all port facilities to receive advantaged access to business opportunities and by excessively increasing tariffs. Due to the design of the concession agreement, it was not possible to resolve these issues between the contracting parties. Therefore, the Zambian Competition Commission intervened. The case is still pending in court today.<sup>46</sup> The case illustrates the fact that contract provisions to provide non-discriminatory access may be difficult to enforce in a timely and effective manner.

43. To safeguard competition in the markets downstream from the market where the concessionaire is active, equal treatment of users needs to be guaranteed and enforceable. Without valid justification, the concessionaire must not be able to deny access to an infrastructure or demand different terms or excessive prices from users.

44. The duration of the concession may significantly affect competition.<sup>47</sup> Long-term concessions create incentives for the concessionaire to make long-term investments, including investments in maintenance near the beginning of the term. Short-term concessions exacerbate the problem of insufficient incentives to invest near the concession’s end. However, short concessions allow for more frequent competitive tendering, which can facilitate entry and ensure that any benefits of increased competition are reflected more promptly.<sup>48</sup>

45. Non-exclusive licences allow for competitive pressure from new entrants, especially if the market in question was incorrectly considered as a natural monopoly or ceases to be one due to technological development.<sup>49</sup> But exclusivity may be needed to allow the

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<sup>45</sup> See Argentina’s reply to the questionnaire for a restriction of vertical integration in the energy sector.

<sup>46</sup> See *Zambian case study*, OECD (2005).

<sup>47</sup> The Dominican Republic’s reply to the UNCTAD questionnaire illustrates the large time span over which concessions may be granted, from two-year concessions to operate lotteries to up to 30-year mining concessions.

<sup>48</sup> OECD (2006), page 48.

<sup>49</sup> OECD (2006).

concessionaire to recoup necessary investments or to compensate losses incurred from service obligations, an issue mentioned above.

## 2. Concession award

46. Since the award of a concession is when competition for the market can occur, it is a critical stage. Modes of awarding concessions include negotiations, different forms of public tenders or auctions and so-called “beauty contests”.

47. Public auctions are generally considered as the most effective way of awarding concessions. This has been recognized by Chile, where a reform of the existing concession law is under discussion. The proposed new law aims to correct deficiencies of the former concession system, which partly resulted from awarding concessions through bilateral negotiations instead of through a bidding process.<sup>50</sup> Indonesian law requires that infrastructure concessions be awarded through a tender procedure.<sup>51</sup>

48. However, only if the principles of equal treatment, transparency and proportionality are respected will public auctions allow competition for the market to take place. Collusion between bidders and corruption of government officials will harm competition and thereby eliminate competitive auctions’ effect of choosing the most efficient bidder. Therefore, preventing and punishing corruption and collusion should be high priorities. For example, sealed bidding may be better than open auction to limit opportunities for communication among bidders, but can make corruption more difficult to detect.<sup>52</sup> Auction design is complex, with seemingly trivial differences yielding substantially different levels of competition in the specific circumstances where they are used.

49. A sufficient number of serious bidders need to participate in the auction.<sup>53</sup> Potential bidders may fail to submit an offer for various reasons. A short time-frame for submitting an offer is one. This occurred, for example, in a forestry concession in Peru. The potential bidder usually needs to visit the tract of forest in question in order to assess its commercial value before submitting an offer. However, in spring 2002, the responsible authority organized the auctions too close to the start of the harvest period, which made it impossible for potential bidders to visit the tract of forest to be concessioned.<sup>54</sup> Therefore many bidders were not able to prepare an offer and participate in the auction. This could have easily been prevented by organizing the auction earlier.

50. Potential bidders may fail to submit offers due to inferior information. If any potential bidder has better knowledge about the true value of the concession to be auctioned than the others, he is greatly advantaged in the bidding. Others may not submit bids because they know they have inferior information. This may happen, for example, when a concession is auctioned for the second time and the incumbent is bidding.

51. Measures to attract additional bidders include broader advertising of the auction, providing background information and reducing the costs of preparing a bid. Bidding costs can be reduced by standardizing features of the auctions, particularly when the same sort of concession or licence is repeatedly auctioned.

<sup>50</sup> Engel E et al. (2008).

<sup>51</sup> Presidential Regulation No. 67 Year 2005 concerning the “Cooperation between the Government and the Private Company in the Infrastructure Procurement.” Indonesia’s reply to the UNCTAD questionnaire.

<sup>52</sup> OECD (2007), page 4.

<sup>53</sup> From Chile’s reply to the UNCTAD questionnaire, it appears to be challenging to attract a sufficient number of bidders.

<sup>54</sup> Galarza E and La Serna K (2005).

52. Joint bidding reduces the number of bidders. Thus, the public authority may want to limit joint bidding to bidders who can only participate in the bid if they bid jointly. Consortia may be necessary to submit a bid with all the relevant expertise. Joint bidding arranged near the deadline for bid submission has an effect very much like collusion. It should be prohibited or highly discouraged.

53. In cases where an authority deems direct negotiations with the potential concessionaires to be more appropriate than an auction, perhaps because the contract has many complex dimensions, competition could be stimulated by parallel negotiations with different applicants, a process called “competitive negotiations”.

54. The “beauty contest” has many of the same characteristics as negotiations. In a beauty contest competitors are evaluated on the basis of predefined criteria, such as technical expertise, financial viability and network coverage. Beauty contests have been criticized as lacking transparency and being subject to lobbying and political intervention.<sup>55</sup>

### **3. Award criteria**

55. The criteria for selecting the winning bidder in an auction should be predefined. These criteria have a crucial impact on the offers’ content and on competition amongst bidders. Multiple criteria – even with a well-specified scoring formula – is undesirable since they tend to lack transparency and be susceptible to manipulation, corruption and the contesting of the award by the losers, inducing delays and protracted conflict.<sup>56</sup> A concession would appear less efficient and renegotiations would be more difficult to resolve when the bidding variable is not an economic parameter.<sup>57</sup> However, economic parameters need to be chosen carefully. Common economic award criteria for infrastructure concessions are (i) the level of tariffs to be paid by the users or (ii) the amount of remuneration to be paid by the concessionaire to the concessioning authority. Tariff bids risk the winning tariff being below the long-run marginal cost of providing the service, and they are subject to change quickly – mostly through renegotiation or review.<sup>58</sup> On the other hand, using the amount of the concession fee to be paid to the government as an award criterion neither stimulates efficiency nor improves consumer welfare, since the concessionaire will have to pass on the costs for a high concession fee to the users.

### **4. Control of the performance of the concessionaire during the term of the concession**

56. Experience shows that the concessionaire’s execution of its contractual obligations must be controlled. In some countries, this control lies with the concessioning authority, whereas other countries attribute that task to specialized supervisory bodies: in Peru the INRENA<sup>59</sup> awards forestry concessions, whereas another administrative body, the Supervision Office of Wood Forest Concessions,<sup>60</sup> supervises their execution.

57. The control of the performance of the concessionaire has a competition dimension: if, e.g., the concession agreement obliges the concessionaire to grant equal access to its facilities, ensuring compliance helps competition in the downstream market. Additionally, ensuring compliance with the competition law is important, particularly if the concession

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<sup>55</sup> OECD (2007), pages 5–6.

<sup>56</sup> Guasch JL (2004), page 98.

<sup>57</sup> Paredes R and Sanchez JM (2003).

<sup>58</sup> Guasch JL (2004), page 99.

<sup>59</sup> Instituto Nacional de Recursos Naturales (National Institute of Natural Resources).

<sup>60</sup> OSINFOR.

confers a dominant position.<sup>61</sup> Two examples below, railways in Zambia and an airport in Chile, illustrate the application of competition law.

58. A 20-year concession to run the Zambian railway system was awarded to a private consortium in 2003. The concession agreement contained no provision on maximum tariffs, despite the railway facing little or no competition to supply certain customers. Zambia Railways, which comprises over 900 kilometres of mainline railways and 300 kilometres of branch line railway, is one of the largest rail networks within the region, covering the entire network from the Sakania Border to Victoria Falls, including the Copper Belt and other branch lines. In February 2007 the Zambian competition authority received complaints about excessive tariffs charged by the concessionaire. It started an investigation on the basis of legal provisions prohibiting an abuse of a dominant position. The authority surveyed customers and analysed the concessionaire's investment plans and their execution. The results from the customer survey were mixed. Whereas some customers complained about the price level, others were satisfied. Taking into account these findings and the investments undertaken by the concessionaire, the Zambian competition authority found the tariffs for rail cargo to be justified and terminated the investigation.

59. In a similar case, the Chilean Tribunal de la Defensa de la Libre Competencia intervened when the terminal operator of one of Santiago's airports was accused of abusing its dominant position by charging excessive prices to freight forwarders and by restricting their access to the terminal. The tribunal found that the concessionaire had not complied with the tariff limitations set by the bidding specifications and had abused its dominant position.<sup>62</sup>

60. The application of competition law in the Chilean and the Zambian examples would not have been possible if the concessionaire had been exempted from the application of the general competition law.<sup>63</sup> Conflicts may arise when the concession agreement allows – or it can be argued that it allows – for anticompetitive behavior. Effective resolution of conflicts when the laws governing the concession contract intersect competition law may stress legal systems. Careful design of the concession and regulatory framework may help to reduce the time and cost of resolving conflicts, and allow them to be resolved in a pro-competitive way.

## 5. Role of the competition authority

61. The competition authority should play a significant role during the design and the award of a concession, since these are important for the enhancement of competition.<sup>64</sup> This

<sup>61</sup> For a further example for the intervention of a competition authority stopping the abuse of a dominant position by a concessionaire in the rail transport market see Peru's reply to the questionnaire.

<sup>62</sup> For the respective decision of the Tribunal de la Defensa de la Libre Competencia as well as for further examples see Chile's reply to the UNCTAD questionnaire.

<sup>63</sup> The Bulgarian law, for example, expressly stipulates that undertakings to which the state or the municipality have assigned services of public interest are subject to competition law insofar as its application does not impede de facto or de jure the fulfilment of the tasks assigned to these undertakings (Bulgaria's reply to the UNCTAD questionnaire). Chile also replied to the UNCTAD questionnaire that concessions are not exempted from the competition law.

<sup>64</sup> Malawi, for instance, replied to the UNCTAD questionnaire that its Privatisation Commission, which is responsible for granting concessions, would often consult the Competition and Fair Trading Commission when competition issues arise in privatisation. In Mexico, the competition law provides for an involvement of the competition authority in public tenders (Mexico's reply to the questionnaire). The United States found that "perhaps the most vexing challenge in dealing with competition problems in the concessions area is recognizing the existence of a competition issue. In many cases, the concession-granting agency has no institutional familiarity with competition issues, and may over- or under-regulate the sector involved." (United States' reply to the questionnaire).

means that the competition authority needs to get involved early in the process.<sup>65</sup> It can do so by competition advocacy and by assisting the concessioning agency in designing the structure of the concession to maximize post-award competition, for example by recommending appropriate horizontal or vertical splits. Advice on the most appropriate award criteria or the design of a public auction may be rendered by the competition authority, as well. In Chile, for example, the Tribunal de la Defensa de la Libre Competencia intervened in the award of seven licences for the air route Santiago–Lima. In order to enhance competition on that route, the tribunal obliged the concessioning authority not to award more than 75 per cent of the routes to the same bidder in a first round of the public auction. Only if no bidders participated in this first round, would that limitation not apply to the second round.<sup>66</sup> Advice on sector-specific regulation may also be required. The competition authority may need to set priorities to limit its involvement to the most important concession projects, and to issue guidelines or policy statements to address others.<sup>67</sup>

## **F. Role of sector regulations**

62. A strong if not dominant market position is often conferred by a concession. Although the competition authority may be able to intervene ex post on the basis of provisions prohibiting the abuse of a dominant position, it may be more appropriate to address a concessionaire's significant market power through a sector-specific regulation which applies ex ante.<sup>68</sup> (Provisions in the concession contract may also address this.) Sector-specific regulation in place prior to the award of the concession can reduce uncertainty faced by potential concessionaires.<sup>69</sup> The main objectives of a regulatory framework are to (i) induce the regulated firm to operate at lowest (efficient) possible costs and (ii) align revenues with costs, allowing the firm to earn only "normal" profits. Often these objectives must be traded off, since firms have incentives to increase efficiency only if they can keep some of the resulting gains. Other objectives may include increased coverage, improved quality of service, and universal service.<sup>70</sup>

## **II. How can the "practice" of concessions be improved? Lessons learned and future challenges**

63. According to polls, there are widespread perceptions in Latin American and Caribbean countries that privatization and concession programs have been unfair and have benefited the wealthy and hurt the poor through job losses and higher tariffs and that the processes have lacked transparency, proceeds have been misused, efficiency gains secured by operators have not been shared by the users and corruption has run rampant.<sup>71</sup> Presumably this view is shared by at least some citizens in other regions.

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<sup>65</sup> For positive examples of an involvement of a competition authority in the process of awarding a concession, see the United States' reply to the questionnaire.

<sup>66</sup> Chile's reply to the UNCTAD questionnaire.

<sup>67</sup> For examples of competition advocacy in relation to concessions see Chile's reply to the questionnaire.

<sup>68</sup> In this respect, see the United States' and Mexico's replies to the UNCTAD questionnaire. Furthermore, according to Panama's reply, the dominant provider of basic local telecommunication services in Panama is under regulatory oversight, including price control, whereas due to the degree of competition in the mobile telecommunications sector, those prices are freely established.

<sup>69</sup> OECD (2006), page 49; Madagascar's reply to the UNCTAD questionnaire.

<sup>70</sup> Guasch JL (2004), page 138.

<sup>71</sup> Guasch JL (2004), page 9.



64. Despite this negative image, some concessions have contributed to economic development and consumer welfare. They have improved and expanded infrastructure and have introduced greater efficiency. But clearly the “practice” of concessions can be improved, and country experience may help identify ways to do that.

65. Questions to promote discussion:

- (a) What has been the experience with using multiple licences to “create” competition? Did the competition at the licensing phase carry on in supplying the market? Are there lessons about “competition creation” through multiple licences?
- (b) What has been the experience of applying general competition law to concessionaires when the concession contract has clauses that appear to restrict anti-competitive conduct?
- (c) What has been the experience in working with authorities who are designing concessions? What strategies appear to be more successful to get an early focus on competitive outcomes?

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