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Current Trends and Optimal Taxation Arrangements in the International Petroleum Industry

PROCEEDINGS

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Abstract

In order to attract the interest of international oil companies and to protect Croatia's legitimate national interests in the opening of this key upstream petroleum sector (exploration and development), a definition and an international clarification of legal, economic and political conditions is needed, as well as knowledge of technical-geologic-exploration characteristics of exploration areas. The need to do so, in the eyes of interested international factors, emerges from the incompleteness of existing legal, and partly financial regulations, and difficulties in following up their amendments in recent years. Croatia's Mining Law with supplemental acts encompasses too broad a range of mineral resources, especially in the part treating production and market. Explanation of ambiguities connected to guarantees of exploitation rights to the company that has made the discovery by investing the risk money, as well as removal of anachronous obligations of the company to participate in further explorations is necessary.

On the other hand, the reporting requirements have to be more comprehensive, detailed and rigorous, especially in the definition of income and expenditures. Some of the existing conditions for joint ventures are too "generous", due to the liability of the national oil company to cover the production tax, especially in the areas with already established production. Due to the aforementioned, and in order to exclude some overcomplicated production-sharing types of arrangements, a modern fiscal regime for the upstream sector of petroleum industry in question is suggested and explained in detail. In this fiscal package, the existing system is augmented with an Additional Profit Tax. The government take, thereby automatically grows in the case of substantial additional profit. At the same time, some marginally economic fields would pay only revenue taxes at a modest rate. A foreign currency fiscal regime specially designed for the oil industry is also suggested. The definition and an international promotion of the role of a national oil company as an independent and directly accessible partner of international companies, and as a meeting point of domestic private initiatives that are gaining more importance is an important political decision. Solution of this set of conditions would enable Croatia to aggressively implement an effective international oil promotion campaign.

Sažetak

Radi pobude interesa međunarodnih naftnih kompanija i zaštite legitimnih hrvatskih nacionalnih interesa u otvaranju ovog ključnog dijela naftne industrije (istraživanja i proizvodnje), potrebno je definirati i na međunarodnom planu razjasniti pravne, ekonomske i političke uvjete isto kao i tehničko-istražno-geološke značajke istražnih prostora. Ovo se nameće iz nepotpunosti postojećih zakonskih i dijelom financijskih propisa i teškoća praćenja njihovih nadopuna posljednjih godina, kako to vide zainteresirani čimbenici. Hrvatski Zakon o rudarstvu s pratećim aktima obuhvaća suviše različite mineralne sirovine, naročito u dijelu njihovog pridobivanja i tržišta na koje se plasiraju. Nužna su pojašnjenja dvosmislenosti oko garancije proizvodnih prava kompaniji koja je došla do otkrića ulaganjem rizičnih sredstava, kao i otklanjanje anakronih obveza proizvođača da sudjeluje u daljnjim istraživanjima.

S druge strane, zahtjevi o izvještavanju trebaju biti razumljiviji, detaljniji i rigorozniji, naročito u definiranju prihoda i troškova. Pojedini dosadašnji uvjeti zajedničkih pothvata možda su suviše "velikodušni", zbog podmirivanja izdvajanja i poreza na proizvodnju od strane nacionalne naftne kompanije, naročito u prostorima s utvrđenom proizvodnjom. Zbog toga, a i zbog izbjegavanja pojedinih suviše složenih "Production-sharing" tipova ugovora predlaže se i detaljno obrazlaže "moderni sistem izdvajanja poreza" za promatrani dio naftne industrije, pri čemu se postojeći sistem nadopunjava dodatnim porezom na izdašnije dobiti (APT). Vladina se dobit automatski povećava u slučaju značajnijih dodatnih dobiti od proizvodnje. Istovremeno, polja s manjom izdašnošću plaćala bi umjerene poreze na ostvareni prihod. Predlaže se i uspostavljanje deviznog režima izdvajanja, posebno podešenog za naftnu industriju. Važna je politička odluka definiranje i međunarodna promocija uloge nacionalne naftne kompanije kao samostalnog i izravno pristupačnog partnera kako međunarodnih kompanija, tako i okupljališta pojedinih inicijativa domaćeg privatnog sektora koji dobiva sve veću važnost. Rješenjem ovoga sklopa preduvjeta otvorili bi mogućnost da Hrvatska realizira agresivnu i efikasnu kampanju naftne promocije.

1. INTRODUCTION

My participation in this First International Symposium of Petroleum Geology has been facilitated by the Croatian Academy of Sciences and Arts, Scientific Council for Petroleum, and INA-Naftaplin. In expressing my gratitude to the Symposium Programme Committee for their invitation, I would like to sound a special note of thanks to Mr Boro Vlašić and to Mr Slobodan Kolbah of INA, whom have liaised with me closely over the last year.

I should perhaps declare at the outset that I am not as knowledgeable about Croatia's petroleum sector history, exploration potential and existing terms as I would like to be. Given this, I have chosen to focus my initial remarks on the recent trends and practices which we, in

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the Commonwealth Secretariat, perceive in the international petroleum industry, particularly as they relate to the attraction of foreign private risk capital for the exploration and development of petroleum resources. Then, having offered a snapshot of the international scene, I would like to share with you some specific thoughts about the most appropriate economic and fiscal terms and arrangements to apply to upstream petroleum operations in this key natural resource sector.

In seeking to bring international arrangements to bear on our deliberations, let me also highlight my particular vantage point. It is that of the Commonwealth - the free association of now 53 independent countries which in the earlier colonial era were tied with Great Britain. These Commonwealth countries are spread around the world - in Africa, Europe, the Caribbean, North and Central America, Asia, Australasia and the Pacific. Collectively, these countries enjoy a varied and often rich petroleum experience. They range from the major oil and gas producers like Australia, Canada, India, Malaysia, Nigeria and my own country, the UK, to small island States like Grenada, Malta, Seychelles and Tonga which, although at present lacking identified hydrocarbon resources, are seeking actively to attract a share of the exploration capital of the international oil companies. In between these two extremes lie both the smaller producers (like Cameroon, New Zealand, Papua New Guinea and Trinidad and Tobago) as well as those countries (like Ghana, Mozambique, Namibia and Tanzania which are presently trying to commercialise their first hydrocarbon discoveries. This is the perspective from which my particular Division in the London-based Commonwealth Secretariat extends confidential advisory services on petroleum and mineral sector development to Commonwealth member Governments.

2. INTERNATIONAL TRENDS

I believe that most informed commentators would agree that in the last five years or so the international petroleum industry has been experiencing some significantly changed investment conditions. Many of these have resulted directly from changes in the policies and terms that Governments are willing to offer the international oil companies in order to attract their risk capital for exploration and development. And these modifications to petroleum sector policies and licensing terms themselves spring from certain rather more fundamental global forces - in particular, during the last decade, the political changes in the former Soviet Union, Eastern Europe and elsewhere, and the very definite shift in emphasis globally in favour of the private sector as the preferred engine for future economic growth and development.

These changes have been sufficiently far-reaching that, nowadays, virtually every Government seeking to establish effective policies and terms to attract foreign petroleum exploration capital needs to take cognisance of them. This, I would expect, inevitably also includes Croatia, notwithstanding your own oil and gas production and reserves (which are, of course, relatively small by world standards). Probably, the only Governments which can afford to operate for a time in the face of these changed global conditions, if they so choose, are those of the world's really major oil producing countries - whose reserves and large national oil corporations give them a certain degree of independence.

Let me now be more specific. The last few years have been characterised by a markedly more pronounced competitive global environment for the exploration and development risk capital of the international oil companies. Many Governments are competing for these limited funds. Compared with the 1980's, there is a far wider choice of exploration acreage worldwide for the oil companies to select, at a time when oil prices (and hence company cashflows available to fund exploration and development) doggedly remain at relatively unexciting levels. For a start, the countries of the FSU and of Eastern Europe are now welcoming foreign oil company investment to a much greater extent than ever before, although in several of those countries the applicable legislation and terms need clarifying and refining. Several other examples can also be quoted of countries offering important new exploration and development opportunities to the international oil companies - Venezuela, Vietnam and China being just some.

Secondly, some Governments (like that of India) are inviting the oil industry to develop existing hydrocarbon discoveries, whilst others (for example, Barbados, Indonesia and Myanmar) are offering the companies access to on-going production through enhanced oil recovery arrangements. All other things being equal, and compared with exploration in frontier areas, these are opportunities of special interest to the companies on account of the considerably reduced risks and more certain rewards.

With the global acreage supply/demand balance seemingly shifting in favour of the companies, it is little wonder therefore that in many countries these realities have already resulted in a more investor-friendly investment regime. In a classical economic response, the "price" of acreage has fallen and, in our Commonwealth experience, this is reflected in more flexible legislative and contractual provisions, weaker minimum exploration work programmes, and softer economic and fiscal terms. In each of these responses, it is probably true to say that the special characteristics of petroleum operations are also being more adequately reflected. One general instance is the emergence in numerous countries in recent years of more attractive terms for frontier and/or deepwater operations. For example, Angola, Gabon, Indonesia, Ivory Coast, Malaysia, Malta, Nigeria, Philippines, Portugal and Thailand are some of the countries which have introduced in recent years concessionary economic and fiscal terms to apply to operations in deep water or other frontier areas.

I would like to cite a few more concrete examples to illustrate how some of the licensing terms are being eased. On the legislative side, some countries are allowing longer exploration periods - for instance, in Gabon, Portugal and China, in Angola for deep water operations, and perhaps also in Norway (where there was a proposal last year for a more certain extended exploration period and for the production period to be extended to 50 years). Some Governments - for example, Namibia - have also relaxed earlier limitations on the size and configuration of exploration licence areas. Still others are introducing specific retention provisions, allowing companies to hold on to discoveries which are not immediately thought to be economic - this was one of the additional incentives on offer to the oil industry in Namibia's second licensing round and recently there were similar proposals in Bolivia and Papua New Guinea. As a last example on the legal front, several Governments are relaxing their requirements for bank guarantees to back up the minimum work programmes, at least in respect of operations undertaken by the larger well established oil companies; Pakistan and again Namibia are two examples that come to mind.

From our Commonwealth standpoint, we are also seeing more exploration contracts awarded on the basis of a minimum work programme commitment comprising only seismic operations in the initial phase. Certainly, this is true of contracts covering frontier exploration areas. In a very real sense, though, it seems that the advent of 3D seismic has helped to bridge the "acceptability gap" between seismic and wells as far as many Governments are concerned. Where wells are offered by companies as part of their minimum exploration programme, these are often conditional on the identification of acceptable structures in the seismic; some such arrangements do also contain back-out provisions involving a specified payment to Government in the event the company does not actually elect to drill. There have also been one or two unwelcome instances where companies either straight-forwardly default on their earlier drilling commitments or otherwise seek to renegotiate and defer those commitments to a later period.

But it is probably in respect of the applicable economic and fiscal terms that the more quantifiable and obvious changes are taking place. Many Governments are now offering acreage to the oil industry under significantly softer economic and fiscal terms than were available only a few years ago. Some of the changes are dramatic, but in some extreme cases it is reasonable to question just how stable such generous concessions are likely to be in the long-term. Unusually, for a country of such high petroleum prospectivity, the UK has the perhaps dubious distinction of having almost the most lenient petroleum fiscal regime in the world; new discoveries there will yield the British Government only a 33% share of profits. Needless to say, a few Governments still demand - and actually still attract new investment under - very tough economic terms; almost without exception, these are the major petroleum producers. In Abu Dhabi, Indonesia, Malaysia, Syria and Venezuela, for example, the overall Government Take expresses as a percentage of total gross profits apparently lies between about 85% and nearly 100%. The range of percentage Government Take around the world is still therefore very wide, but there has been something of a downwards shift within the range for those countries which have only frontier exploration acreage or less prospective areas to offer.

It is interesting to note the main ways in which the reduction in Government Take is being brought about. In the last few years the world has, of course, witnessed a general reduction in corporate tax rates, as part of the wider economic liberalisation measures adopted by many Governments. Income tax rates in the 30-45% range are now very common, compared with rates of nearer 50% ten or so years ago. In most instances, the oil companies have benefited from these reductions.

But many of the more petroleum-specific economic provisions have also been eased. Perhaps unsurprisingly, the production royalty burden (frequently levied at a 12.5% rate a decade or more ago) has been diminished, in several different ways. Those few Governments that are introducing a petroleum fiscal package containing royalty and tax for the first time are setting the royalty rate at more modest levels - for example, 9% in the Falkland Islands. Some Governments are reducing their royalty rates. Some countries (for example, Greece, Greenland, Madagascar and Venezuela, to name but a few) have adopted a graduated sliding scale royalty structure so that lower rates are paid on low production and higher rates on high. In Gabon, there is a royalty holiday period for marginal fields. In Pakistan, royalty is creditable against income tax payments. And, of course, a few countries (such as the Netherlands, Norway and the UK) have even abolished royalties, either completely or for certain categories of production.

Production sharing terms have also generally eased in favour of the companies. This includes both a raising of the annual ceiling on the amount of production available for cost recovery, as well as a reduced profit oil share for the State. Many examples could be cited but in some cases (for example, Malaysia and the Philippines) more favourable cost oil limits are available for deep water operations.

Certain other aspects of an economic and fiscal nature also deserve mention. Except in the case of highly prospective acreage, it is probably true to say that there is a reduced emphasis on the use of (and certainly the amounts collected through) signature, discovery and production bonuses. There is less front-end loading of fiscal burdens and an increasing tendency for the use of progressive revenue-sharing mechanisms (an important trend to which I shall refer again later). There is perhaps also a growing awareness of the desirability of treating foreign and domestic investors equally, as well as public and private investors. And, something by way of a contrary impact, Tax Administrations are paying more attention to transfer pricing concerns and to enforcing compliance and reporting requirements; in a similar vein, antiquated deductions such as depletion allowances are being withdrawn and rules are being adopted to prevent thin capitalisation practices. These latter actions are all designed to ensure a more rational and fair tax base which, of course, partially offsets the reductions in tax rates.

Significantly too, many more of the economic and fiscal terms contain biddable and negotiable elements. Scope may be given for this in governing legislation - such as the need to agree with investors the top two rates of Additional Profits Tax in Namibia - or more often, in the case of production sharing arrangements, some or all of a Government's preferred parameter values are set out in its Model Petroleum Agreement but the actual cost oil and profit oil percentages are negotiated and agreed with investors on a case by case basis: India is one of many countries that follows this approach. Often, the same goes for participation levels and, occasionally too, royalty. The added degree of flexibility inherent in this negotiations approach is not at all surprising in the present oil industry investment climate.

There is one final point I would like to make regarding international trends and practices, and that concerns the apparently diminishing role of State participation. This is, of course, consistent with the increased emphasis being placed more generally on the contribution to be made by the private sector. Thus, we learn that Barbados, Finland, Hungary and India are among the numerous countries worldwide that are partially privatising their national oil companies. In many other countries, recent licensing rounds have proceeded on the basis of a reduced participation interest by the State - for example, in Colombia for small fields, in Philippines for deep water operations, in Pakistan for less prospective acreage, and in Gabon, Greenland, Netherlands and Tanzania for all new licences. In still other countries the requirement for any level of State participation has apparently been removed completely - for example, in New Zealand, Peru, Seychelles and Trinidad. And in the instance of those few countries such as the Falklands and Namibia which are perhaps fortunate enough to be commencing their petroleum sector arrangements from scratch, there is no mandatory requirement for State participation.

Clearly then, the petroleum world is moving on. And Governments which are now seeking to increase the involvement of private and foreign oil companies in the further development of their national petroleum resources, including (as I understand it) Croatia, will need to take heed of these trends and developments in the international scene if they are to successfully achieve their objectives.

3. DESIRABLE CHARACTERISTICS OF AN ECONOMIC AND FISCAL REGIME

Let me now turn to a more detailed consideration of the principal economic and fiscal terms appropriate to upstream petroleum operations. Apart from the actual or perceived petroleum prospectivity of a country or area, the economic and taxation terms imposed by Governments are of paramount importance in determining the interest or otherwise of the multinational oil companies in seeking exploration acreage. (An appropriate legislative and, usually, contractual framework is also, of course, necessary). The economic and fiscal terms determine the balance between the inevitable risks and the hoped-for rewards associated with all petroleum operations; they may make or break a deal between an oil investor and a Government. It almost goes without saying that examples can be cited of both "good" and "bad" petroleum fiscal regimes, and I would like now to outline what I believe are the desirable, if not essential, characteristics of an economic and fiscal package for upstream petroleum operations.

A modern petroleum economic and taxation package should be designed to achieve several ends. Obviously, it must simultaneously satisfy the critical requirements of Governments as well as those of investors. In very broad terms, Governments will wish to ensure that, whilst yielding them an acceptable level and pattern of tax and other receipts, preferably at no or minimal direct cost to the State, the package attracts an adequate level of investment on a recurring basis and sustains a reasonable level of petroleum sector activity. From the investors' standpoint, the fiscal regime should allow the companies to fully recover their outlays, as quickly as possible, and allow them to retain an adequate level of profits; the oil companies also strongly prefer the taxation terms to be known in advance and to remain stable throughout the life of their petroleum operations.

These seemingly conflicting objectives can in fact be reconciled successfully if the fiscal package is carefully constructed. What then should be the principles upon which such a package is formulated.

I would suggest that the economic and fiscal regime should be straight-forward in design and transparent in application. (This eases understanding, negotiation and administration). Whilst containing some in-built flexibility, it should involve the exercise of minimal Government discretion ex-post. It should be neutral in effect (creating no distortions) and encourage maximum efficiency in operations. It should be predictable in its impact. It should yield Government at all times during the production phase some minimum level of "Take", but allow the companies to recover their costs quickly. The bulk of the Government's Take should arise through taxes and other revenue-raising mechanisms based on profits, and probably also on profitability. In fact, in exchange for "front-end" relief (granted, for example, by import duty concessions, modest royalty rates and accelerated depreciation for tax purposes), the tax package can be structured so as to enable the Government's Take to build up fairly quickly after the point of cost recovery and then rise, in a progressive manner, still further as the overall level or rate of project profitability increases. The possibility for tax leakages, either domestically or internationally, should also be minimised; in this regard, we can note in passing that supposed concessions like tax holidays are inefficient and probably ineffective.

There are numerous examples worldwide of special petroleum economic and fiscal packages which reflect most, if not all, of these principles. Such fiscal arrangements are balanced and fair to both companies and host Governments, in both the short and the long-term; they thereby lay the economic framework for a stable working relationship between the parties that may endure for several decades.

4. PROGRESSIVE REVENUE-SHARING MECHANISMS

It is sometimes argued that progressivity is one of the key features of such fiscal regimes which make for greater stability in the investor-Government relationship. Certainly, from our standpoint, progressive revenue-sharing mechanisms seem to be featuring more often in petroleum economic and fiscal arrangements. Let me say a few more words on this particular topic.

A petroleum fiscal regime is said to be progressive if it yields for Government a higher percentage *share* of field-life pre-tax profits from any very profitable developments than it does from any developments of more modest profitability. Under such a scheme, the Government's share will be low on any marginal developments - this helping to ensure their commercialisation in the first place - but will be increasingly greater the more attractive is the petroleum project. A high Government share from any highly profitable operations is the quid pro quo for the more lenient tax treatment of developments of more modest profitability. In order to generate this progressive effect overall, at least one of the specific revenue-raising elements in the fiscal regime must be linked to some measure of project *profitability*, and not just the quantum of profits. Usually, the profitability measure selected is either a rate of return or the investment multiple (sometimes also called the "R-factor"). In practice, the two most common revenue-sharing mechanisms which have been adapted and adopted in this way are the additional profits tax (which also goes by many other names, such as resource rent tax) and production sharing arrangements. Occasionally, though, royalties, State participation and even, exceptionally, income tax, have been made progressive.

Many examples can be quoted of each. A survey I conducted in 1993 concluded that about one country in eight had incorporated progressive revenue-sharing mechanisms in their petroleum regimes. Since then, even more countries have adopted them. Some of the leading examples of the rate of return based additional profits taxes are: Australia, Namibia and Papua New Guinea; I understand that Poland and Kazakhstan have also recently adopted this form of tax. Algeria, Angola, Ghana, India, Malta, Qatar and Zambia are just some of the countries that have linked their production shares to a rate of return or R-factor. And to quote just one other example, Tunisia has a graduated sliding scale of both royalty and income tax rates where the respective rates of levy are determined by the R-factor.

5. ONE POSSIBLE OPTIMAL TAXATION PACKAGE

In turning to the concluding section of my presentation, I would like to propose a possible optimal taxation package for the upstream petroleum sector. There is nothing terribly revolutionary about it, and no doubt some people will maintain that taxation can never be optimal! But taxation is, and seemingly always has been, an inevitable part of life. Two thousand years ago, as told by Saint Luke in the Bible: "*...there went out a decree from Caesar Augustus, that all the world should be taxed... ...and all went to be taxed, every one into his own city*".

The fiscal package which I am about to outline exhibits the desirable characteristics I referred to in section 3. It can achieve the broad objectives, and satisfy the minimum requirements of Governments and investors, which I also briefly alluded to.

This fiscal regime comprises an ad-valorem royalty, a modern petroleum income tax and a multi-tier Additional Profits Tax. State participation can also be accommodated, if necessary. These are the principal components. I would also expect annual area rental charges to be levied. But duties and sales taxes on imported and exported items necessarily and exclusively required for the petroleum operations should be minimised and, at least during the exploration phase, preferably not be levied at all. (This reduces the front-end costs of the companies and helps to ensure that every $ they spend in the country is devoted to physical exploration work per se). The right of a foreign party to export its petroleum produced, to have unfettered access to the foreign exchange proceeds generated, to be able to repatriate its profits freely, and for the petroleum produced to be valued for royalty and tax purposes at fair international market prices, should all be part of the overall economic and fiscal package too.

Let met now outline in turn each to the principal components of this package, beginning with royalty.

Royalty should be imposed on an ad-valorem basis, and at a modest rate, on the value of oil and gas produced. It should be payable all entities in the licence. This will yield at all times during the production phase an appropriate minimum level of Take for Government - thereby satisfying political as well as economic objectives as the petroleum (a key non-renewable natural resource) is exhausted. However, to provide for even greater flexibility, the Minister should be authorised to waive, defer or reduce the payment of royalty in circumstances when to do so is likely to maximise the recovery of hydrocarbons from a particular field in a given time period, for example, on marginal operations during field production decline. If the Government wishes to gain access to oil gas resources directly, there could also be a provision requiring the royalty to be paid in kind.

The second element in the fiscal package is a specially formulated **Petroleum Income Tax** (PIT), with detailed provisions tailored to suit the unique characteristics of the oil and gas industry. The PIT rate should be established somewhere in the 30% to 40% range (depending at what rates the other elements in the package are set at) and levied in a non-discriminatory manner. In order to accelerate cost recovery by the investing oil companies, qualifying project expenditures should be depreciated over a short time period: immediate write-off in full would be appropriate for exploration (and, of course, operating) expenditures, whilst development expenditures could be allowed over a 3, 4 or perhaps 5 year period. In the computation of PIT, royalty would be an allowable deduction and losses should be permitted to be carried forward without restriction. PIT should be assessed on a company by company basis, meaning that would be no narrow ring-fencing - thus providing some additional incentive for further exploration and development within the country. Ordinarily, it could be expected that the bulk of a Government's Take from petroleum operations would arise through this PIT. Ghana, Namibia, Papua New Guinea and Seychelles are examples of some of the countries which have adopted modern PIT rules along the lines suggested here.

A multi-tier **Additional Profits Tax** (APT) would constitute the third (and often last) principal element in the fiscal package. Royalty and PIT would be allowable deductions in the computation of this cash-flow based tax, which would only be paid in the event of, and in respect of, more profitable operations. Probably triggered by an after-tax rate of return (which could also be inflation-indexed, to give the investor added protection), a multi-tier APT structure would inject an even greater degree of progressivity into the overall fiscal package than a single-tier APT. (In practice, two or three tiers should be sufficient). As with the thresholds that trigger it, some or all of the APT tax rates could be negotiable on a case by case basis with each investor, thereby effectively determining the maximum marginal rate of total Government Take on the basis of the perceived characteristics of each licence area. It might be appropriate to ring-fence the APT more narrowly than the PIT in order to lend balance to the timing and profile of the Government's Take. An option could also be included for the Government to take the APT in kind, if access to physical quantities of oil and gas is desired.

If necessary, it would also be possible for some form of **State participation** to be included within this fiscal package. Obviously, though, the royalty, PIT and APT rates would have to be established and/or negotiated bearing in mind the nature and extent of the participation component.

The outlined fiscal package is a workable "mainstream" one, in the sense that by and large something similar to it is adopted by about half of the countries in the world today. To a greater or lesser extent, it is embraced by both small and large countries; by current producers, presently non-producers and for frontier acreage; and by both developed and less-developed countries. This package is modern, straight-forward in design and relatively easy to administer. It is flexible in impact, automatically adjusting the actual fiscal burden to the intrinsic profitability of the particular petroleum operations. Companies can recover their costs quickly and only then will the Government's Take build up. Assuming appropriate rates for the royalty, PIT and APT, it is internationally competitive and the PIT should be a creditable tax for foreign oil companies in their home jurisdictions. It puts all participants in the venture on an equal footing and is equally applicable to oil and gas. It can be so structured that other important national objectives can be satisfied simultaneously if desired - such as direct access to oil and gas production, and a role for State participation.

I have deliberately shyed-away from actually recommending that this particular fiscal package should be adopted by Croatia, although I believe it would in fact be quite appropriate here, too. In practice, each economic and fiscal regime must be tailored to address and reflect the particular circumstances of each country. In this regard, I am aware that, at least in the recent past, Croatia has expressed a preference for cost-recovery production sharing arrangements. My understanding is that, under these arrangements, INA-Naftaplin assumes a 50% State interest - a very large interest - from the development stage (perhaps under carried interest terms) and that the foreign parties' tax liability is satisfied out of the State's share of Profit Oil. The *form* of Croatian Take is therefore quite different to that which would accrue to a Government under the royalty and tax-based fiscal package I have just outlined; also, except with respect to the physical production rates, the overall economic impact of the present Croatian terms cannot be progressive.

Presumably, there are specific reasons why Croatia has decided to pursue what, in our view in the Commonwealth Secretariat, are the more complicated production sharing arrangements. However, even within a production sharing format, many of the desirable characteristics of a fiscal package which I described earlier can be accommodated, and Croatian authorities may perhaps wish to revisit these. As one final point of information on this matter, I would simply like to bring to the attention one of the main conclusions of the London-based Petroconsultants' 1996 Annual Review of 110 Petroleum Fiscal Regimes, namely, the apparent trend during the last two years away from production sharing contracts towards a royalty/tax structure. To quote from the Executive Summary of Petroconsultants' recently published Review:

"The change in Romania to a royalty/tax system reflects one of the main trends in fiscal regimes during the last two years - notably in Latin America and Eastern Europe - this type of fiscal regime. Production sharing continues to dominate in the Middle East, CIS and Far East although in Vietnam, for example, the PSCs are being modified so that they also include royalty and tax elements."

6. CONCLUDING REMARKS

In bringing this presentation to a close, I must acknowledge that I have necessarily been rather selective. I have concentrated on the principal economic and fiscal terms which have a direct bearing on the division of upstream petroleum project profits between a host Government and a private sector investor. Of course, traditionally, petroleum arrangements with foreign investors also embrace several other terms with an economic impact - such as licence area rentals, minimum annual training expenditure commitments and minimum exploration expenditure commitments. There are also important provisions with respect to foreign exchange entitlements, valuation of petroleum, accounting rules, bank and performance guarantees etc. I have ignored all of these other matters, either because they are of a secondary monetary magnitude or because they are of a different nature in the overall scheme of things. Equally, I have not sought to comment on the potentially significant indirect economic benefits which petroleum operations can generate - such as employment creation, the impetus for regional development, encouragement for the further development of related service industries etc.

I hope my remarks have been of interest. Attracting private (and especially foreign) exploration capital to a particular host country is a time-consuming, challenging and often complex exercise, requiring a multi-disciplinary approach in which the geological, economic and legal considerations are successfully blended. I wish Croatia well in your future petroleum exploration, development and production endeavours.