

Ministry of Finance

Evaluation of Angolan Petroleum Sector

Executive Summary Initial Report

> Last Version This report has 40 pages

Table of Contents

1 Executive Summary	3
1.1 Objectives of this study	3
1.2 Structure of the initial report	3
1.3 Limitations and Analytic Restrictions	5
2 Reserves, Production, Exports and Costs of Oil	7
2.1 Precedents of the Angolan Petroleum Sector	7
2.2 Characteristics of the Angolan Petroleum Sector	7
2.3 Operator Companies and Active Fields	8
2.4 Recoverable Remaining Reserves and Production	9
2.5 Costs of Capital	10
2.6 Operational Costs	11
2.7 Analysis of Angolan Natural Gas	12
3. Legislative, Normative and Fiscal Agreements	13
3.1 Primary Legislation	13
3.2 Concession Decrees	13
3.3 Previous Production Sharing Agreements	14
3.4 Recent Production Sharing Agreements	14
3.5 Complexity of the Fiscal Regimen	15
3.6 The Part of the Concessionaire	16
4. Distribution of Incoming Flows of Petroleum Revenues	17
4.1 Detailing of Incoming Flows of Petroleum Revenues for 2000	17
4.2 Petroleum Account	19
4.3 Liftings and Sales	20
4.4 Fiscal Reports from Ernst & Young	20
4.5 Signature Bonus and Regional Payments	21
4.6 All the Companies — Reconciliation and Conformity Shortcomings	21
4.7 Sonangol — Reconciliation and Conformity Shortcomings	22
4.8 Issues on Fiscal Reconciliation — Sonangol and the Ministry of Finance	22
4.9 Issues on Profit Oil Reconciliation — Sonangol and the Ministry of Finance	23
4.10 Commission Payments of Profit Oil to the Concessionaire	24
4.11 Profit Oil payments by Oil Companies to the Concessionaire	24
5. Distribution of Outgoing Flows of Petroleum Revenues	26
5.1. Financial Flows of OGE	28
5.2. Cash Calls of Sonangol	29

KPMG

5.3 Excessive collections by the Cash Calls Operator	29
5.4 Payment Methods for Cash Calls	29
5.5 Payments for Servicing the Debt	30
6. Financial Reports of Sonangol and BNA	32
6.1 Evaluation of Sonangol Accounts	32
6.2 Accounting Practices of the BNA	34

1 Executive Summary

The Executive Summary forms an abstract and an overview of the initial report. It sums up the main facts and discoveries that are included in the detailed context of each chapter. Thus, the Executive Summary can be read by itself, in case the reader desires to obtain a deeper level of knowledge on the precedents of the work accomplished and the main related facts and discoveries identified.

1.1 Objectives of this study

The objective of the project "Diagnóstico Financeiro e Monitorização das Receitas Petrolíferas Estaduais" (Financial Diagnostic and Monitoring of the State Oil Revenues) is to perform a diagnostic study on the upstream petroleum sector, since it affects the public finances of the nation. The objectives of the diagnostic are to help the Angolan Government to increase the transparency related to the flows of revenues originating in the production of oil and create a management ability to supervise and anticipate the values and flows of these revenues.

1.2 Structure of the initial report

The structure of the initial report is the following:

- Chapter 1 is an introduction to the report and supplies the precedents of the project;
- Chapter 2 presents an evaluation of reserves, production and exports of oil;
- Chapter 3 examines the legislative, normative, contractual and fiscal agreements;
- Chapter 4 evaluates the arrangement of inflows of oil revenues to the State;
- Chapter 5 evaluates the arrangement of outflows of oil revenues ; and
- Chapter 6 examines the operation of the Petroleum Account and of the Sonangol accounts and the management report of the BNA.

The appendices are in the same document of the Initial Report and include the following:

- Appendix A: Technical data on Reserves and Production;
- Appendix B: Evaluation of the measurement of exports, data management and export terminals;
- Appendix C: Consortium Relationships;
- Appendix D: Evaluation of Administrative Procedures;

- ٠
- Appendix E: Analysis of Sonangol's Accounts; and Appendix F: Description of all current fixed term contracts relative to the sale of oil from • Sonangol in 2000.

1.3 Limitations and Analytic Restrictions

This Report shall not be seen as suitable to be used beyond the Government, IMF and World Bank.

If that is not the understanding of the Government, it should indeed direct the attention of the analysts to central, fundamental and indispensable aspects to be taken into account.

Namely:

In Angola there is a national currency, the Kwanza, a symbol of sovereignty. This currency has suffered year after year very sharp depreciations that even forced the introduction of several decimal places and even the replacement of the face designation: Kwanza, New Kwanza, Readjusted Kwanza, etc.

Not wishing to "dollarize" their economy, the Government and the Central Bank (Banco Nacional de Angola - National Bank of Angola) have been allowing private and state companies, institutions and public entities to have "accounting books" in two currencies, the Kwanza and the Dollar.

However, the accounting procedures adopted by those economic entities have major weaknesses.

The accounting procedures almost never handle in the best way the complexity of working with two currencies, the large devaluations and the big inflation indexes, which require a high degree of organization and substantial investments in information technologies¹ so that exchange rate variations and the reevaluation of third party balances can be handled in a proper way.

For those reasons, the reconciliations both intra- and inter-accounting processes are difficult and sometimes even impossible. Notice the difficulty in processing through accounting any documents in Kwanzas to Dollars, and vice-versa, at the date the operation was transacted, by the issuer and by the receiver, knowing the existing limitations in terms of territorial coverage, even in small perimeters, of telecommunications systems and document flows.

There are great difficulties, in an economy where exchange rates vary daily, to work with uniform exchange rates of the issuer and the receiver of the document issued and to be processed in accounting.

There is a lack of "quantification" logic in the conversion of Kwanzas into Dollars, at the end of each year, at the time of the issuance of financial reports in private and public companies and in State entities, when the conversion is done at the exchange rate for the end of the year.²

¹ requiring changes of procedures and functional polyvalence

² this procedure is usual and generally adopted for analytical finals in order to make "accountings" more intelligible and perceptible

For that reason, the data that exists at the Ministry of Finance, at Sonangol and at the BNA can change internally.

The recording of a financial document in these institutions should be done at the same exchange rate as the entity that issues the document, but this never (or almost never) happens and for that reason the reconciliations become obviously very difficult.

The financial records of the BNA and Sonangol themselves, which are processed and presented in national currency, and which, for practical reasons such as reading and the perception of magnitude, are also prepared and converted in Dollars, are using the exchange rate for the end of the year, which misrepresents the magnitude itself in an analysis at the date of their occurrence.

All these limitations and restrictions should always be taken into account, and any time the charts and tables existing in this Report are analytically observed.

The Final Report will deal with this matter under the aspect of recommendations and procedures.

We show below, for better understanding, and as an example, the "usual" procedures of two receivers of the same document in foreign currency for financial recording:

	Example		Record	ing of financi	al document	Document conv	ersion end of	year 2000
Document	Amount	Entity	Date	Exch. rate	KzR	KzR	Exch. rate	UsD
1	1,000,000	Α	30/Jun/00	10,501	10,501,000,000	10,501,000,000	16,860	622,835
1	1,000,000	В	31/Oct/00	13,898	13,898,000,000	13,898,000,000	16,860	824,318
				Difference	3,397,000,000		Difference	201,483

The same financial document of UsD 1,000,000 is recorded at the entity A at the date of the recording, 30/Jun/00, at the official exchange rate of 10,501, and entity B, due to reception difficulties, records the same document at the official exchange rate of 13,898, of 31/Oct/00, which is the day of its recording.³

The "accountings" of the two entities for the same financial document show values in national currency which are different (a difference of KzR 3,397,000,000).

When at the end of the year the conversion of the balances is made from Kwanzas into Dollars, the "accountings" of the two entities do the conversion at the exchange rate of the end of the year, which in December 2000 was of 16,860.

For the same initial financial Document of UsD 1,000,000, at the end of the year, the resulting values presented are for one entity of UsD 622,835 and for the other of UsD 824,318.

That is:

- the same financial document of UsD 1,000,000 cannot be reconciled between the entities A and B, presenting a difference of UsD 201,483;
- the same financial document cannot be reconciled between the issuing entity and the receivers A and B, presenting a difference of UsD 377,165 and UsD 175,682 respectively.

³ when it should have been at the date the operation was transacted, which originated the issuance of the document

2. Reserves, Production, Exports and Costs of Oil

Chapter 2 of the initial report presents precedents about the exploration and the production of oil in Angola. This chapter analyzes the technical characteristics, such as reserves, production and costs, and supplies a context for the evaluation of the aspects of revenue flows.

2.1. Precedents of the Angolan Petroleum Sector

The Angolan oil industry had its start in 1955, with the discovery of oil in the maritime shore area of the Kwanza valley by Petrofina. Jointly with the Angolan Government, Petrofina established the consortium Fina Petróleos de Angola (Petrangol) and built a refinery in Luanda to process the oil.

The main expansion of the oil industry took place at the end of the 60's, when Cabinda Gulf Oil Company (Cabgoc) discovered oil "offshore", off the Angolan "onshore" territory of Cabinda. In 1973, oil became the main export of Angola and since then many more discoveries were made, not only in the Cabinda area, but also in other areas off the coast of Angola.

5.4. 2.2. Characteristics of the Angolan Petroleum Sector

The other potential areas for the production of hydrocarbons in Angola are found mainly "offshore". At the end of the 70's, the government started a program to encourage the exploration for oil "offshore", and the Angolan coast, with the exception of the Cabinda Concession, was divided in 13 exploration blocks and licensed to oil companies as per production sharing Contracts. Sonangol was created in 1976 to manage all the oil production and distribution. In 1978, the Angolan Government authorized Sonangol to acquire a 51% participation in the Cabinda and coastal QA concessions (now FS and FST), even though the management of the operations remained under the control of the operators.

During 1994, Sonangol requested proposals for deep water blocks (below 200 meters) and later it also licensed blocks in very deep waters.

The "offshore" areas include a band near the coast which contains Blocks 1 to 13 and Block 0 ("Cabinda Concession"), a deep water band containing Blocks 14 to 30 and a very deep water band containing Blocks 31 to 34.

That is:

- A band near the coast including Blocks 1 to 13 and Block 0 ("Cabinda Concession");
- A deep water band including Blocks 14 to 30;
- A very deep water band including Blocks 31 to 34.

The coastal areas include the Cabinda, Congo and Kwanza blocks. Less than half of these blocks is actually in production. Other "onshore" blocks contain discoveries that have not been developed, are in an exploration phase, or are not licensed ("open").

There are two main bases for the supply of oil, the Kwanda Base in Soyo and the Malongo Base in Cabinda. There are also installations for the supply of "offshore" oil operations in Lobito and in Luanda.

Since September 2001, there are four main terminals for oil exports: one "onshore" terminal in Malongo (Block 0), one FSO in Palanca (Blocks 1, 2, 3 and FS/FST) and FPSOs in Kuito (Block 14) and Girassol (Block 17). There are also FPSOs in Kiame (whose operations will cease in April 2002) and, in the area of Canuku of Block 3, the Ocean Producer, whose operations started in November 2001. The FSO in Lombo Este and the FPSO in Kiabo were closed in the year 2001.

There is a 35,000 bbl/day refinery in Luanda, supplied by crude produced mainly in Blocks 3 and 4.

2.3. Operator Companies and Active Fields

Cabgoc (nowadays a subsidiary of Chevron) has operated in Angola for more than 40 years and discovered more than 30 oil fields in Block 0, which has presently a production of about 450,000 bopd.

Texaco (nowadays merged with Chevron), is the operator of Block 2, and has marked its presence in Angola for more than 25 years, and discovered 20 fields, 16 of which were developed and have presently a production of about 70,000 bopd.

Elf (nowadays TotalFinaElf), is the operator of Block 3, and has marked its presence in Angola for more than 20 years, and developed 8 oil fields which today have a production of about 150,000 bopd.

Other operators that produce oil in Angola are Agip, Ranger and Fina (nowadays TotalFinaElf).

The majority of the oil fields in production are located in shallow waters off the Cabinda territory (Block 0) and also further south in Blocks 1 to 4. Currently, the production of deep water Blocks 14 and 17 was also started.

Angolan crude is generally high quality, medium to light density (30°-40° API) with low sulfur content. The most commonly commercialized crudes are those of Cabinda (a mixture of Takula and Malongo), mixtures of Soyo and Palanca and the Nemba, Kuito and Girassol crudes.

The Blocks presently in production are the FS and FST in the Congo Basin ("onshore") and Blocks 0, 1, 2, 3, 4, 14 and 17 ("offshore").

2.4. Recoverable Remaining Reserves and Production

The total recoverable remaining reserves were estimated as about 7 to 8 billion barrels at the end of 2000 (including Block 18). Two thirds of the oil reserves are found off the coast of the Cabinda territory and off the north coast of Angola near Soyo. During the last decade, the reserves recorded in new discoveries exceeded the depletion of reserves. In the last few years, many discoveries of new oil fields occurred, especially in Blocks 14, 15, 17 and 18.

Blocks	STOIIP	Reserves	Production until	Remaining
	MMbbl	MMbbl	01/Jan/01	Reserves
			MMbbl	01/Jan/01
				MMbbl
0	24,454	4,160	2,460	1,700
1	50	8	6	2
2	-	458	326	132
3	2,629	1,152	820	332
4	-	20	18	2
14	2,551	1,364	23	1,341
15	2,400	1,070	0	1,070
17	4,623	1,590	0	1,590
18	-	-	-	-
FS/FST	-	276	240	36
Total	-	10,097	3,893	6,205

Table 2.1: Summary of Reserves and Production

Source: Scott Pickford/Core Lab

The daily production for 1999 was of 788,000 barrels/day (see Concession Map in this report). The equivalent production for 2000 was of 742,000 barrels/day, based on a total production of 271 million barrels, as verified by the Consultants and confirmed by the oil industry. This production was also independently confirmed by data used in the Financial Model.

All the Angolan production of crude is exported, with the exception of about 35,000 bbl/d, Supplied to the refinery in Luanda. The following table summarizes the production forecasts for each block for the period 2001-2005.

Tablw 2.2: Summary of Production Forecasts

Block	2000	2001	2002	2003	2004	2005
	MMbbl	MMbbl	MMbbl	MMbbl	MMbbl	MMbbl
0	162	154	156	139	130	132
1	0.7	0.6	0.4	0.3	0.3	0.2
2	26	23	20	17	14	12
3	54	49	36	28	25	20
4	1.8	1.8	0	0	0	0
14	22	27	36	32	66	98
15	0	0	0	0	43	91
17	0	6	55	73	128	146
18	0	0	0	0	0	0
"onshore"	4.7	4.5	3.9	3.2	2.9	2,.7
Total	271	266	307	292	409	503

Source: Scott Pickford/Core Lab

2.5. Capital Costs

The table presents the capital costs for the Girassol field in Angola, vs. comparable fields in Nigeria, Brazil and South America. It is difficult to compare development costs at these depths, since the technology is presently evolving. However, the mild environment of West Africa should make development in very deep waters and in ultra deep waters less costly than equivalent developments either in the Gulf of Mexico or in Brazil.

Area		Capital	Operationa	Capacity	\$/bbl/da	Well	Water
7 II Cu		Expense	1 expenses	Cupucity	y	s	Depth
		s	1 expenses		y	5	Deptii
		Million	USD/bbl	Thousand			Feet
		USD	03D/001	s of bbl/d			reet
	A.Y				10.5	20	2 100 /2 70
Shell Bonga	Nigeria	2,700	-	200	13.5	29	3,100/3,70
							0
Girassol	Angola	2,800	-	200	14	36	4,400
Roncador	Brazil	1,000	-	90	11.11	-	4,500/5,60
		,					0
Nakika	Gulf of	1,260	2.7	100	12.60	-	6,000
	Mexico	,					,
Espadarte	Brazil	1,800	-	200	9.00	-	-
Barracuda/Cartagin	Brazil	2,500	-	300	8.33	51	2,200/3,90
a							0
Kuito	Angola	-	-	120	-	-	1,200
Hoover/Diana	Gulf of	-	-	-	-	-	-
	Mexico						
Kizomba A	Angola	2,900	2.6	250	11.60	59	3,600
Thunder horse	Gulf of	-	-	-	-	-	6,000
	Mexico						
Ceiba	Equatoria	-	-	-	-	-	2,400/3,00
	1 Guinea						0

Table 2.3: Capital Costs in Angola vs. other countries

Source: Scott Pickford/Core Lab

The capital expenses estimated for the period 2001 to 2005 for Angola are:

Block	2000	2001	2002	2003	2004	2005
	Millions	Millions	Millions	Millions	Millions	Millions
	of \$					
0	333	425	1,067	1,159	777	430
1	0	0	0	0	0	0
2	47	109	48	23	20	15
3	83	73	52	28	15	6
4	0	0	0	0	0	0
14	189	289	465	572	595	606
15	135	310	976	1,411	1,103	705
17	685	834	952	1,083	622	331
18	0	0	0	0	0	0
FS/FST	1.9	5.3	9.2	4.2	2.1	1.6
Total	1,474	2,045	3,570	4,279	3,135	2,094

Table 2.4: Summary of Forecasts for Capital Expenses (E&A, Development and Relinquishment)

Source: Scott Pickford/Core Lab

2.6. Operational Costs

Global operational costs (excluding relinquishment) in Angola are relatively low as compared to international standards. This is due to the mild environment, to the low taxes on platforms, and to the fact that the costs of work redefinition, or a large part of them, are capitalized (100% TFE and 66.67% ChevronTexaco).

Tabela 2.5: Summary of Forecasts for Operational Costs

Block	2000	2001	2002	2003	2004	2005
	MM \$					
0	355	350	357	364	371	379
1	3.4	3.5	3.2	3.0	2.8	2.3
2	85	78	61	68	62	43
3	64	70	46	44	44	43
4	22	22	11	0	0	0
14	89	102	114	118	101	134
15	0	0	0	38	199	445
17	0	25	95	90	81	136
18	0	0	0	0	0	0
"onshore"	22	25	24	24	24	24
Total	640	675	711	750	885	1,206

Source: Scott Pickford/Core Lab

2.7. Analysis of Angolan Natural Gas

Large reserves of combined and non-combined natural gas were discovered in Angola. Third parties estimated that until 1999 the discovered reserves of natural gas totaled approximately 1.6 Tpc (tera or thousand billion cubic feet) and that this number could grow to 9.5 Tpc, or even more, when the new and more recent discoveries were added.

ChevronTexaco and Sonangol are studying the development of a plant for LNG (Liquefied Natural Gas) located in the Luanda area adjacent to the refinery. We understand that the plant will be designed to process up to 4 million tons of LNG per year, by means of a single processing chain, expandable through the installation of additional chains at a later date. The plant will probably not be operational before 2006, as per the best forecasts.

3. Legislative, Normative and Fiscal Agreements

Chapter 3 of the initial report describes the main legal and normative agreements that support the financial and fiscal duties in this sector, and analyzes the complexity of the regimen, since it affects the management of revenues.

3.1. Primary Legislation

In Angola, the most important primary legislation related to the upstream oil and gas sector is Law No. 13/78, which determines the legal reach for upstream oil activities. The Law makes it quite clear that all oil mineral rights belong to the State and indicates that the state oil company, Sonangol, is the only Concessionaire of rights to all exploration and production activities. After the independence, the rights formerly granted to other companies were transferred to Sonangol.

The Law determines that foreign companies that desire to perform exploration and production activities can only do so in association with Sonangol and that the forms of association shall be by means of a commercial company, a consortium or through a Production Sharing Agreement.

The Law determines that Sonangol can become a participating partner in the field. Sonangol owns an exploration and production company for this purpose and participates in the development of several blocks.

The Law relative to Oil Activities is clear and determines in concise form the legal environment. The Law is also reasonably flexible. It allows for the creation of several forms of contractual agreements. That is an advantage, since the investors can modify their priorities in this area.

3.2. Concession Decrees

The mechanism for the concession of a block is through the Concession Decree issued by the Government. These decrees bestow the rights to the concession upon the Concessionaire and determine the corresponding main duties. Among these are the execution of approved work plans, the production of monthly reports relative to the service contracts or tasks initiated, and the custody of cutting samples, perforation cores, and geologic and geophysical reports.

Decree 30/95 is related to the regulation of financial flows and currency exchange operations that correspond with the exports and sales of oil by the oil companies, in order to support the currency exchange operations of those companies relative to the payment of taxes due to the Ministry of Finance, and take into consideration the financial transactions associated with a special account created for that purpose in the BNA. A fundamental principle of Decree 30/95 is that the taxes of all oil companies shall be paid to the Ministry of Finance using the BNA as an intermediary.

The evaluation of the oil for fiscal purposes is determined in the Concession decrees and is done in stages. The investors supply information to the Petroleum Ministry relative to their own transactions. Then, the Ministry establishes a market price for the corresponding period (quarter). In case of disagreement, there is a procedure to request an independent specialized opinion. The Ministry takes this into consideration when taking a final decision (see Appendix D "Evaluation of Administrative Procedures").

The Concession decrees provide a clear inclusion of the covered areas and generally the areas covered are quite appropriate. The decrees applicable to old contracts have been gradually updated and in the general picture, this has been an advantage. The matter of the decrees increases the perceptible stability of the entire regimen. The discussion of the rights and duties of the different parts in the agreements is generally clear and with a modern style.

3.3. Previous Production Sharing Agreements

Production Sharing Agreements are the main device for Sonangol, as Concessionaire, to authorize the implementation of exploration and production in the area of the concession by a group of grantees, including one or more foreign companies and, in some cases, Sonangol.

PSAs include previous production PSAs and Deep Water PSAs. In the previous Production Sharing Agreements, the main economic characteristics are the recovery of costs with limits for "liftings", depreciation and recovery of costs, and the sharing of the Profit Oil progressively related with the accumulated production, plus a maximum price.

In a world context, the limits of oil costs are quite conventional. They guarantee that some Profit Oil will be available in advance. The presence of "liftings" in the development costs with depreciation is not very common, but it exists. The concept of the dimension of the "lifting" as a key element for cost variations is used in oil taxation (The plan of the sharing program of Profit Oil can also take this into consideration).

The conditions for the sharing of Profit Oil can be adapted to the presence of "liftings". The "lifting" can be seen as a rough agent for the return on investment. Conventional stipulations under which Profit Oil is shared relative to production are not capable of coping, with total efficiency, with a high volatility of oil prices, and their related consequences to the profitability of the activity.

The price limit guarantees that the Government receives the total benefit of any large increase in prices. However, this concept means that there is effectively a marginal tax of 100% imposed when the maximum price is exceeded. This does not produce appropriate incentives for cost conscientiousness.

3.4. Recent Production Sharing Agreements

In the most recent Production Sharing Agreements, the main economic characteristics are the recovery of costs with limits for "liftings", depreciation and recovery of costs, and the sharing of the Profit Oil based on the return rate attained.

Conceptually, this type of package is in line with modern thought. The income for the activity varies with the behavior of oil prices, with the size of the discovery, and with the costs of exploration and development. Relating the sharing of Profit Oil with the return rate attained allows all these factors to be incorporated in the calculation.

The precise effects of the scheme are dependent on the detailed stipulations. Generally, the conditions include a "lifting" in the costs of development. In those cases where the sharing of Profit Oil is related to the production, the presence of this characteristic is rapidly understood. In those cases where the sharing of Profit Oil is related to the return rate attained, the presence of a "lifting" requires more justification.

There is a limit for the recovery of costs. This guarantees that some Profit Oil will be available in an advance stage and it will also extend the process of achieving a total recovery of costs on the part of the grantee.

Depending on the precise details of the scheme, it is possible that "gold plated incentives" (lack of cost consciousness) could be introduced. The higher the "lifting" and the larger the participation of the State in the Profit Oil, the larger will be the possibilities of the effects of these incentives being introduced.

3.5. Complexity of the Fiscal Regimen

The Angolan fiscal regimen is complex. There are different regimens for Association contracts in Concession areas and for Production Sharing agreements.

In each of these regimens, there is a subsidiary level of complexity, with different contractual variants applicable to different regimens.

According to the Association Contracts in Block 0, Area A differs from Areas B and C as to the available discounts relative to the Tax on Oil Transactions. On the coast, the areas of Congo and Kwanza differ as to the applied tax on exploration rights.

When it comes to Production Sharing, the agreements have evolved over time, from previous contracts based on accumulated production, to more recent deep water contracts based on the rate of return.

Most of the main elements of a PSA are negotiable, and specific parameters, such as taxes, terms of recovery of costs and "liftings" differ therefore between the contract and the contractual variant. The Tax on Oil Returns, which is charged both in Association Contracts and in Production Sharing Agreements is applied at a different rate — 65.75% as per the Contracts of the Cabinda Association and 50% as per the PSAs.

The complexity and the cost of administering a regimen of this type can be particularly strenuous. To administer the whole regimen in an effective way requires a significant level of specialized resources. The fact that each PSA is negotiated individually is time consuming and expensive.

The load will fall mostly on Sonangol and on the regulating ministries, such as the Petroleum Ministry and the Finance Ministry. The complexity will greatly increase the difficulty of administering the income and consequently the importance of guaranteeing institutional capacity. The implementation of measures that make possible a healthy and efficient management of the fiscal and legislative regimen is an important problem which should be solved by Sonangol and by the Ministries.

	Cabinda A	Cabinda B/C	FST (Soyo)
Production Tax (Royalties)	20%	20%	16.66%
Tax on Oil Revenues	65.75%	65.75%	65.75%
Oil Transaction Tax	70%	70%	
Premium on investment and	50%,	100%,	50%,
production	\$5.77/bbl	\$7.96/bbl	\$5.77/bbl
Participation of Sonangol	41%	41%	51%
Legal Basis	Dec	rees	Decrees
	4135	41356/57	
	4135	41356/67	
	111	22/75	
	5/	86/76	
	29/	/86	

Table 3.1: Summary of the Angolan Fiscal Regimen

Source: Sonangol and International Oil Companies' Concession and PSA documents

3.6. The Part of the Concessionaire

In Angola, the state oil company Sonangol is the oil industry Concessionaire in the name of the Government. The company is also involved in exploration and production activities and as a regular supplier of goods and services to the upstream sector. Sonangol also owns a dominant position in the downstream activities.

4. Distribution of Incoming Flows of Petroleum Revenues

Chapter 4 in the initial report presents an evaluation of the effective revenue flows from the oil sector to the Government of Angola. The objective of the evaluation is to supply the government with a picture, as precise as possible, of the oil revenues due, paid and owed, and to identify discrepancies or omissions in the information and reconciliation process. The evaluation was centered on the year 2000, since this is the year requested for this project by the Terms of Reference. The final report will present recommendations for the improvement of reports and in the management of outgoing revenues.

The main flows of incoming revenues are:

- Oil taxes (Tax on Oil Transactions, Tax on Oil Income, Exploration Rights) paid by International Oil Companies and by Sonangol.
- Payments of Profit Oil made by international oil companies and by Sonangol to the Concessionaire.
- Oil taxes paid by Sonangol to the Government.
- Signature bonus and other types of taxes paid by international oil companies to the State.
- Provincial payments (to the provinces of Cabinda and Zaire), paid by international oil companies to the provincial governments.
- Loans received.

4.1. Detailing of Incoming Flows of Petroleum Revenues for 2000

The total estimated incoming flows for 2000, including all taxes, Profit Oil, signature bonuses and participation on the net profit of Sonangol after the payment of taxes, but excluding the loans received in 2000, were of \$4,344 million, as shown on Table 4.1 below.

Details of Incoming Flows of Revenues	Millions of USD
Taxes (Exploration Rights, IRP and ITP) according to the Ministry of	1,697
Finance, excluding Sonangol	
Sonangol Taxes	1,355
Profit Oil of the Concessionaire (90%)	1,075
Consignments to provincial Governments of Cabinda and Zaire	149
Signature Bonus	0
State Financing	1,000
State to State Financing	94
Participation on the net profit of Sonangol after taxes, as per non-revised	102
financial reports ⁴	
Total Estimated Incoming Flows ⁵	5,472

Table 4.1: Incoming Flows to the Banco Nacional de Angola (National Bank of Angola) (Millions of USD)

Details of Incoming Flows of Revenues	Millions of USD
BNA Financing ⁶	239
Total Estimated Incoming Flows	239

Table 4.1: Incoming Flows to Sonangol (Millions of USD)

Details of Incoming Flows of Revenues	Millions of USD
Concessionaire's Commission ⁷	134
Loans received by Sonangol through the Cabinda Fund during 2000. ⁸	80
Loans received by Sonangol through the Petrol Project during 2000. ⁹	34
Total Estimated Incoming Flows	248

⁴The net profit of Sonangol after taxes according to the Financial Reports of Ernst & Young is a total of \$406 million dollars, however only about 20 to 25 % of this amount is effectively an income to the OGE (Law 9/95), because there are Reserve Evaluation, Social, Materials Stimulus and Investment Funds deductible from the Sonangol net profit.

⁵ Source: Direcção Nacional de Impostos (National Tax Authority)

⁶Source: BNA – External Debt Office

⁷Source: Fiscal Declarations – Ernst & Young

⁸ For the received capital of \$80 millions of dollars were negotiated interest responsibilities of \$34 millions of Dollars. Source: BNA

⁹ For the received capital of \$34 millions of dollars were negotiated interest responsibilities of \$17 millions of Dollars. Source: BNA

4.2. Petroleum Account¹⁰

The Petroleum Account, a transitory account held in the BNA to help with tax payment deadlines, the payment of *cash calls* (liquidity demands) and the service of the debt of the Government, stopped functioning in 2001. Complications arose in the aftermath of an insufficiency of available funds for the service of the debt and, as a result, the Sonangol account was excessively debited. Besides, Sonangol suffered losses due to the impact of inflation and delays in receiving the equivalent in Kwanzas for the American Dollars, which were worth less due to the weakening of the Kwanza.

According to the terms of Decree 30/95, the total revenues for non-reserved sales of oil have to be sold to the BNA. Then, the BNA shall credit the equivalent in USD of these sales to Sonangol. Of these revenues, Sonangol shall pay its taxes and *cash calls*.

It is important to highlight an essential development in the monitoring and management of revenue flows, that was established in Angola at the end of the 90s. As we said before, the Petroleum Account was created as a transition account held at the BNA to improve Sonangol's tax payment deadlines, the payment of *cash calls* and the balances of the export sales share of Sonangol, while concessionaire and participative partner, which are used to reduce the Government's debt. The role of the Banco Nacional de Angola (BNA) would be to act as intermediary responsible for the recording of accounting inflows relative to these activities.

The Petroleum Account works in the terms of the legislation defined by Decree 30/95, according to which the total non-reserved balances coming from export sales shall be sold to the BNA. Then, the BNA will credit Sonangol with the balances in Kwanzas from sales made in American Dollars. With these balances, Sonangol shall fulfill its duties relative to *cash calls* and taxes. Any surplus is transferred from the Petroleum Account in the BNA to the accounts of Sonangol in Angolan commercial banks.

In case there is a deficit, it shall be supported by the transfer of funds from Sonangol accounts in Angolan commercial banks to the Petroleum Account in the BNA. The BNA will also debit the amount in Kwanzas equivalent to the balances in USD that it received and that it shall pay in the name of the government, to satisfy the amount of public debt owed.

Even though the Petroleum Account was established to improve the control and the management of the oil revenues, no significant regular reconciliation procedures were established between the Ministry of Finance, Sonangol and the BNA to approve the balance of the Petroleum Account on a monthly basis. No regular closing procedures are applied to determine the range of the validity dates of the sales balances and related petroleum account and other transactions (that is, payment of taxes) involving the Ministry of Finance, the BNA and Sonangol, which led to permanent discrepancies.

¹⁰ The Final Report will analyze how Sonangol actually retains a percentage of the export sales balances in USD and pays its taxes directly to the Ministry of Finance and some of its *cash calls* directly to operators, as per the association and PSAs agreements.

4.3. Liftings and Sales

A comparison was done between the volume data of "liftings" from the fiscal reports of each company, and the "liftings" data from the port inspections performed by the independent company Saybolt.

The "liftings" for the year 2000, according to the fiscal reports totaled 272 million barrels, of which the part of the foreign oil companies was 160 million barrels and Sonangol's part 112 million barrels. The "liftings", according to Saybolt's report, totaled 268.5 million barrels.

A net discrepancy of 3.9 million barrels or 1.45% of the total "liftings" was observed.

Analyzing the possible causes for these differences, the Consultants presented as the most consistent reasons:

- lack of control and precision in the measurements made. For example, according to data from the Svenska fiscal reports, which show a table with a difference of 100,000 barrels, Saybolt did not consider, for the year 2000, two loadings done, one for 68,760 barrels and the other for 31,240 barrels.
- a result of the practice in the State/Refinery protocol, where the sales to the Refinery are not declared.
- A consequence of the "cash calls" protocol.

There are procedures established by decree 30/95, for the production of information for the BNA, about the value of the sales in USD for each individual shipment done by Sonangol.

However, according to BNA, there is a reception on a constant basis of consolidated reports from Sonangol, but there is no reception invoice after invoice that would allow a timely reconciliation relative to their payment.

4.4. Fiscal Reports from Ernst & Young

The fiscal reports relative to the year 2000 for each one of the foreign oil companies and for Sonangol, revised by the accounting firm Ernst & Young in the name of the government of Angola are not, and don't pretend to be, an audit. Instead, they only represent a compilation and revision of the information supplied by each company.

The total taxes and Profit Oil paid by all the companies in 2000, according to the fiscal reports, totalized \$3,881 million. The owing balance at the end of the year was \$853 million.

The total taxes and Profit Oil paid by Sonangol in 2000, according to the fiscal reports, totalized \$2,146 million (including \$937 million in taxes and \$1,209 million in Profit Oil transferred to the Ministry of Finance by the Concessionaire).

The apparent balance owed by Sonangol in 31/Dec/00, according to the fiscal reports, totalized \$669 million. This represents 78% of the total owed balance of \$854 million for all the companies.

4.5. Signature Bonus and Regional Payments

The accumulated signature bonuses paid to date to Sonangol totalized more than \$1.0 thousand million.

The social bonuses that totalized \$65 million since 1997, were steered to "Social and Communitarian Projects" defined by the Government.

Assignments are made of part of the income for regional payments, deducted on the Tax on Oil Revenue by the oil companies, to the provincial governments of Cabinda and Zaire.

Besides the regional payments, the Ministry of Finance adjusts the income from the Tax on Oil Revenues in order to take into consideration *ad-hoc* expenses of the Petroleum Ministry. These payments — as well as the regional payments to Cabinda and Zaire — reduced, in 2000, the income form the Tax on Oil Revenue assigned to the Ministry of Finance in \$149 million.

4.6. All the Companies — Reconciliation and Conformity Shortcomings

There are evident discrepancies between the taxes and the Profit Oil payments, as recorded by the fiscal reports, the Direcção de Impostos (Tax Authority) of the Ministry of Finance, the Accounting Department of the Ministry of Finance and the Bank of Angola (see below).

Table 4.2: Summary of Total Taxes and Profit Oil Received in 2000 — All the Companies

Entity	Total Taxes and Profit Oil	
	Thousands of USD	Thousands of KZ
Taxes and Profit Oil received according to the Ernst & Young	3,881,962	37,174,210
Fiscal Reports		
Taxes and Profit Oil received according to the Tax Authority	4,276,196	39,013,312
of the Ministry of Finance		
Revised total from The Ministry of Finance for adjustments to	3,654,893	
Profit Oil Tax of 1999 paid in 2000 and Profit Oil Tax of 2000		
paid in 2001		
Taxes and Profit Oil received according to the Accounting	4,469,146	40,773,580
Department of the Ministry of Finance		
Taxes and Profit Oil received according to the BNA	1,650,400	18,165,933

Source: Compilation of E&Y, Ministry of Finance and BNA records.

Two values are shown for the Ministry of Finance (one of them rectified to take into consideration the payments of the year end). The discrepancy between the total recorded by the Fiscal Reports and the total recorded by the Ministry of Finance is \$227 or \$394 million, depending on which of the two values from the Ministry of Finance is used.

The discrepancy between the total recorded by the BNA and the total recorded by the Ministry of Finance is \$2,625 or \$2,004 million.

These discrepancies can be explained by the constraints in procedures and/or accounting practices and/or Petroleum Account and/or non-uniform use of exchange rate, etc, as the consultants flag in the chapter about detected constraints.

The Taxes and the Profit Oil received in 2000, as recorded by the National Bank of de Angola (BNA), are underevaluated.

The Taxes and the Profit Oil received according to the Accounting Department of the Ministry of Finance are \$4,469 million, as compared to \$4,276 million received according to the Tax Authority (Direcção de Impostos) of the Ministry of Finance, that is, a discrepancy of \$192 million. The Consultants did not find in existence any procedures to coordinate the reconciliation process between these two departments of the Ministry of Finance, but they note that a possible reason could be one of those signaled in the constraints, (lack of accounting standards and procedures) that is, the taxes are paid via DAR (receipt and filing document for revenue) which are recorded at the Direcção Nacional de Impostos (National Tax Authority), but the Accounting at the Ministry of Finance as it makes the same recording, also records the deductions to the taxes done by the oil companies at the time of the regional payments.

4.7. Sonangol — Reconciliation and Conformity Shortcomings

According to the Sonangol Fiscal Report of 2000, the company paid to the Ministry of Finance a total of \$2,146 million in taxes and Profit Oil. However the Ministry of Finance indicates an amount paid during 2000 of \$2,430 million.

Part of those taxes, paid by Sonangol directly to the Ministry of Finance are recorded as "compensation". This happens when Sonangol does a "lifting" that is assigned to the payment of a loan. The value of this loan is not paid by the Petroleum Account at the Banco Nacional de Angola (BNA), and therefore is not recorded there, since it is immediately used to pay the loan.

4.8. Issues of Tributary Reconciliation — Sonangol and the Ministry of Finance

According to Sonangol's Fiscal Report, the total taxes it paid in 2000 were \$937 million and the balance due on 31/Dec/00 was \$158 million. The Direcção de Impostos (Tax Authority) presents two different values for comparison. The first one records a total of \$1,355 million in paid taxes. The second one records a total of \$911 million in paid taxes and a balance due on 31/Dec/00 of \$12 million. It was not possible for the Consultants to find a reconciliation of the differences.

The Consultants could not obtain a significant model reconciliation, maintained in a permanent basis and regularly updated. A model reconciliation would include the following steps, using the year 2000 as an example:

- make the correspondence for the year 2000 of the totals due, relative to Exploration Rights, IRP, ITP and Profit Oil, as due by individual companies, including Sonangol.
- compare these totals due in 2000 with the taxes effectively sent to the Direcção de Impostos (Tax Authority) relative to the year 2000.
- prepare a rectifications plan, relative to retroactives of previous years. This would demonstrate, for instance, the taxes paid in 2001 relative to 2000 and the taxes paid in 2000 relative to 1999, as well as any other closing adjustments associated, needed to identify the total amount due relative to the year 2000 and the difference representing the retroactives for 2000.

the Consultants could not obtain an analysis of the official maturity of the tax retroactives due by all the oil companies and by Sonangol in 31/Dec/00, prepared by the Direcção de Impostos (Tax Authority) and accepted by all the companies involved. Such analysis, to be updated every month, could become a basis for the application of fines for lateness in payment.

The present legislation determines that the payment of taxes, including the tax on Oil Revenues, shall be carried out until the last day of the second month following the month during which the oil is extracted. During 2000, Sonangol did "liftings" and monthly sales. However, the Direcção de Impostos (Tax Authority) only received tax payments from Sonangol in three months of that year. This suggests that the present legislation, in what deals with the due date for the payment of taxes, is not being complied with, but this lateness situation originates with the procedures that are concerned with compensation, due to the function of the Petroleum Account.

4.9. Issues on Reconciliation and Profit Oil — Sonangol and the Ministry of Finance

The Consultants obtained, with the Ministry of Finance, two sources of Profit Oil. The first one records \$1,074 million in Profit Oil paid in 2000. The second one reveals a Profit Oil received equivalent to \$886 million. The Consultants could not reconcile the two totals, and they also could not reconcile those totals with the Profit Oil received of \$1,209 million, as recorded in the Sonangol Fiscal Report.

In the same document obtained from the Ministry of Finance which indicated the \$886 million as paid, there was an owed balance of \$269 million. Applying the same adjustments for the year end to the Profit Oil received of \$1,074 million, a possible alternative balance of \$81.4 million is obtained.

4.10. Commission Payments of Profit Oil to the Concessionaire

The Concessionaire, according to the present legislation, is authorized to deduct up to 10% of the total amount of Profit Oil due from oil operations in the form of a commission, to make up for its operational costs. In case the invoiced operational costs are less than the maximum of 10% allowed by the law, the remaining balance shall be handed over to the Ministry of Finance.

In 2000, Sonangol retained the total 10%, equivalent to \$134 million.

The Consultants could not obtain any documentation, invoice or form equivalent to significant invoicing that, in accordance with good accounting practices, should be sent by the Concessionaire, describing the time and internal costs incurred by it as a direct result of the collection and remittance of Profit Oil.

The part of Profit Oil due to the government is transferred by the Concessionaire to the Direcção de Impostos (Tax Authority) net after deduction of the commission. In accordance with good accounting practices, the payment of gross Profit Oil to the Ministry of Finance and the payment of the amount of the commission by the Ministry of Finance should be represented by two different transactions.

Between 2001 and 2005, the total commission received by the Concessionaire for tat period could exceed \$500 million ¹¹.

4.11. Profit Oil Payments by the Oil Companies to the Concessionaire

As per the old PSAs, we understand that the government's part of Profit Oil represents a physical volume of oil sold by Sonangol in the name of the government. Sonangol shall then remit the revenues to the Ministry of Finance, through the BNA, as per the present legislation, on a quarterly basis.

According to the most recent PSAs based on a rate of return, we understand that the oil companies calculate beforehand the estimated part of Profit Oil between the grantee and the government. Sonangol will charge afterwards the part of Profit Oil of the government to the members of each consortium. We could not determine the way in which subsequent rectifications are performed, so as to reflect the Profit Oil on the effective production of the quarter.

It was not possible for the Consultants to prepare, from the information contained in the fiscal reports, a significant composite analysis of the Profit Oil owed by each foreign oil company and by Sonangol P&P, in order to make the total of that analysis correspond, roughly, to the Profit Oil equivalent paid by these companies, on an individual basis and for all the companies, to the Concessionaire. It was also not possible for the Consultants to find a correspondence, starting from the fiscal reports, of the total effectively paid by these companies to the Concessionaire with the agreed gross amount payable by the Concessionaire to the Ministry of Finance, before the deduction of the commission.

¹¹ See Fifth Report of Quarterly Projections.

The Consultants noticed that the Concessionaire did not remit, in due time, to the Ministry of Finance, on a regular basis, the 90% of the part of Profit Oil due to the government (incorrect operating procedures of the petroleum account).

The total balance of the part of the government of Profit Oil due to the Direcção Nacional de Impostos (Tax Authority) at the end of the year 2000 is \$512 million. This amount is very close to the one indicated in the fiscal report of the Concessionaire, which shows an owed balance of \$510 million.

5. Distribution of Outgoing Flows of Petroleum Revenues

Chapter 5 in the initial report presents an evaluation of the outgoing flows of oil expenses and identifies any irregularities, discrepancies or inconsistencies in the way those outflows are reported and managed. The evaluation was centered on the year 2000, since that was the year requested for this project by the Terms of Reference. The key areas handled in this chapter have two objectives.

First, the Consultants evaluated the procedures and the data supporting the payments of *cash calls* (requests for financing) made by Sonangol Holding and by Sonangol P&P to a variety of active companies, necessary to fulfill their respective duties as participative partners.

Second, the Consultants evaluated the adopted procedures and the data supporting the payments to offset debts incurred by Sonangol relative to its own operations (e.g., financing of the Cabinda Fund) or in the name of the government. In particular, the Consultants tried to evaluate the oil production which is presented as a guarantee for these loans and the implications and risks of having recourse to these loans for the management of revenues and financial stability. As part of this job, it was also important to recognize the main problems with debts not related to the oil sector, such as the governmental credit lines for activities not related to oil.

The main outflows of petroleum expenses are:

- payments of *cash calls* made by Sonangol Holding and by Sonangol P&P to the various oil operators of the blocks where the Sonangol Group has a participation interest;
- payments for the service of the debt made by Sonangol Holding and by Sonangol P&P to finance internal expenses of the group;
- the service of the debt for loans to the government for activities not related to petroleum and flows for Angola's state budget, which incorporate credit lines available to the Government.

Total estimated outflows for the year 2000 are summarized on the following page.

Analysis of the Outflows of Revenues	Millions of USD
Estimated Cash Calls paid by Sonangol Holding and P&P	339
For the Service of the Debt of pending loans as per the Cabinda Fund ¹²	228
For the Service of the Debt of pending loans as per the Soya Palanca Fund ¹²	45
Estimated Outflows Stated for 2000	612

Table 5.1: Sonangol – Estimated Outflows of Petroleum Revenues (Millions of USD)

Source: Sonangol, BNA and foreign oil companies.

Tabela 5.1: BNA - Estimated Outflows of Petroleum Revenues (Millions of USD)

Analysis of the Outflows of Revenues	Millions of USD
Service of the debt for BNA financings ¹³	240
Estimated Outflows Stated for 2000	240

Source: BNA.

Tabela 5.1: Estado - Estimated Outflows of Petroleum Revenues for the OGE (Millions of USD)

Analysis of the Outflows of Revenues for the OGE	Millions of USD
Taxes and Profit Oil	4,127
Payments to Provincial Governments	149
Financings to the State ¹⁴	953
Financings State to State ¹⁵	155
Estimated Outflows Stated for 2000	5,384

Source: Sonangol, BNA and foreign oil companies.

 ¹² Capital UsD 167,048,541 and Interest UsD 61,439,900 – Source SONANGOL – Direcção de Finanças (Finance Dept.)
 ¹³ Capital UsD 237,129,355 and Interest UsD 3,050,218 – Source BNA – Gabinete da Dívida Externa (External Debt Office)

 ¹⁴ Capital UsD 874,612,371 and Interest UsD 78,256,972 – Source BNA – Gabinete da Dívida Externa (External Debt Office)
 ¹⁵ Capital UsD 88,087,320 and Interest UsD 66,954,330 – Source BNA – Gabinete da Dívida Externa (External Debt Office)

5.1. Financial Flows of the OGE

As can be seen in the following table, there is a difference between the revenues and the expenses of the OGE originated in petroleum financial flows for an amount of about \$88 million.

OGE – Inflows and Outflows of Petroleum Revenues (Millions of USD)

Analysis of the Financial Inflows and Outflows for the OGE	Millions of USD
Taxes (Exploration rights, IRP and ITP) as per the Ministry of Finance,	1,679
excluding Sonangol	
Sonangol's taxes	1,355
Profit oil of the Concessionaire (90%)	1,075
Consignments to the Provincial Governments of Cabinda and Zaire	149
Financings to the State	1,000
Financings State to State	94
Participation in the net profit of Sonangol, after taxes, as per non-revised	102
financial reports	
Estimated Inflows Stated for 2000	5,472
Taxes and Profit Oil	4,127
Consignments to the Provincial Governments of Cabinda and Zaire	149
Payment of the service of the debt of financings to the State	953
Payment of the service of the debt of financings of State to State	155
Estimated Outflows Stated for 2000	5,384

Source: Sonangol, BNA and foreign oil companies.

The reason for this difference, ("gap"), is related, as per information given to the consultants, to the fact that they were received, in 2000, in the form of merchandize and not in the form of a financial flow as such.

5.2. Cash Calls of Sonangol

Estimated *cash calls* for 2000, equivalent t \$339 million, increased to \$381 million in 31/Dec/01, while the estimate for non-paid *cash calls* in 31/Dec/00 of \$6.0 million increased to \$28.0 million in 31/Dec/01. Sonangol will be responsible for the payment of these pending debts in case the exploration phases are successful. The tendency is consistent with the additional pledges of exploration and production expenses as perceived by the Financial Model and contributing to the negative cash flows of the years 2003-2005.

5.3. Excessive Collections by the Cash Calls Operator

Sonangol Holding paid monthly *cash calls* for Block 2 in crude. Sales results for 1.5 million barrels totaling \$43.4 million were used by Sonangol to pay *cash calls* totaling \$34.8 million. The excess payment in crude was rectified through refunds of cash by Texpan during the year 2000, totaling \$10.0 million. The resulting net balance of \$1.4 million in 31/Dec/00 represented a net payment shortfall on the part of Sonangol for the year 2000.

However, the payment shortfall mentioned above reflected only the net reduction in the total balance required in excess, accumulated over the whole year (represented by apparent payments in excess from before Texpan) of \$7.8 million in 1/Jan/00 to \$6.4 million in 31/Dec/00.

This situation originates form mandatory protocols for *cash calls* in February 1996, where 100,000 bbls per load were added to pay for the *cash calls*.

In 1996 and 1997 the same situation had already happened, payment in excess of *cash calls* for all the associates of Block 2, an issue that was the focus of an audit. Non-operators demanded the payment of interest (18%), reducing the compensation of the *overnight*.

This mandate was abandoned in April 2001.

5.4. Payment Methods for Cash Calls

In 2000, the Consultants observed three different methods by which Sonangol P&P and Sonangol Holding paid their parts of the respective *cash calls* (The payment method with a passage through the Petroleum Account was only partially used).

The first method, used in Blocks FS and FST, is where Sonangol Holding paid its *cash calls* directly to the operators in cash, avoiding therefore the Petroleum Account.

KPMG

The second method, used in Block 0 and Block 3, is where Sonangol Holding resolves its *cash calls* with Cabgoc and TotalFinaElf, according to the old protocol, which manages the payment through the Petroleum Account. Cabgoc guarantees all or most monthly dos *cash calls* dues by Sonangol, because it finances the *cash calls* part of Sonangol. As a compensation, it can rectify the equivalent amount that it must pay to the Ministry of Finance in exploration rights, versus the *cash calls* due by Sonangol on that month.

The third liquidation method used in Block 2, is that by which Sonangol Holding paid its part of *cash calls* through the results of crude sales. To do this, the company gathered \$43.4 million from the sale of 1.5 million barrels of crude during 2000. The *cash calls* for block 2 effectively total only \$34.8 million. The payments in excess during the year were reduced by receiving two separate refunds in cash from Texpan, totaling \$10.0 million.

5.5. Payments for Servicing the Debt

The Consultants searched, in three specific areas, for sufficient data to evaluate the entanglements and risks when resorting to loans from Sonangol (service of the debt from their own operations or in the name of the government) in order to manage revenues. The three areas were:

- financing based on the established in dedicated oil contracts;
- financing by international loans, contracted by Sonangol for its costs of developing the Cabinda concession; and
- financing by international loan that are not related to the Cabinda operations, but which are supported by dedicated oil contracts (i.e., eventually supported by the Soyo Palanca Fund).

The Cabinda Fund is essentially an aggregate of two previous Funds (namely the Takula and the Malongo Funds), each of which was started in the 80s to supply the means of support for the financing of Sonangol for its part of the development, maintenance and operation costs in the Cabinda Concession Area.

Based on different Association contracts, each associate has apparently the right to a part of the production from Cabinda and Nemba as a compensation for a contribution to it, which is equivalent to that part of the costs. Sonangol's part is 41%. The Fund works as a conduit designed to assure that Sonangol can have access to the international financing markets, in order to allow the financing of its 41% of the costs. The objective of the Cabinda Fund is to work as a mechanism for the direct payment of loans it is supporting.

The Soyo Palanca Fund was created in 1989, at a time when a certain consortium of potential financers of Sonangol wanted to loan to Sonangol, but only on the basis of guarantees given on the oil (and the revenues), that they could trust for the reimbursement. No guarantees were given to those possible financers.

Even though, according to its conditions, it has nowadays the possibility of being used directly, and on a current basis, this Fund is substantially different from the Cabinda Fund because it supports an obligation to reimburse and to service the debt, and it is also structured so that it can supply a "guaranty" only under circumstances where the reimbursement and the service of the debt, due to a specific creditor, which is protected by it, is also supported by any other mechanism.

The loans, in the terms of financing by dedicated oil contracts, are excluded from the conditions of the Fund. The total capital owed is approximately \$484 million.

The loans of the Cabinda Fund include loans totaling \$1,418 million.

The loans of the Soyo Palanca Fund include loans totaling \$1,075 million.

The BNA informed the Consultants that it only knows about a limited number of "liftings" ¹⁶ made by Sonangol. These are mostly relative to obligations of the Cabinda Fund. The BNA informed that several "liftings" ¹⁷ are being made by Sonangol which are not registered by the Banco Central (Central Bank). This situation is in conflict with the present legislation.

¹⁶ Between 4 and 6 "liftings" of State Oil load (i.e., SONANGOL as participating partner and as Concessionaire) were notified to the BNA by SONANGOL during the period from January 2001 to the end of May 2001.

¹⁷ Possibly more than 15 "liftings" between January 2001 and the end of May 2001.

6. Financial Reports of Sonangol and BNA

The last chapter of the initial report includes issues like the accounting practices of Sonangol and of BNA which are outside the limits of the revenues that flow in and out of the State, but that still have important impacts in the management of revenues.

6.1. Evaluation of Sonangol Accounts

The Consultants obtained a copy of the financial reports of Sonangol for the year closing on 31/Dec/00. The objective was to evaluate the level of trust that could be placed on these financial reports and identify any apparent accounting anomalies before trying to analyze these reports as per the terms of reference.

The Consultants also had access to the Relatório de Revisão Limitada ao Balanço da Sonangol (Report on the Limited Revision to Sonangol's Balance Sheet) and concluded that, due to scope limitations, the external auditors ¹⁸ could not perform an audit in conformity with the international accounting standards (IAS). One of the main results of the scope limitation was that no auditor could voice an opinion on this accounting giving or not a true and just picture of the financial status of the Sonangol Group. It is important that the readers be aware of this limitation.

The Consultants could only perform a very elementary and limited analysis of these activities both upand downstream. This situation is due to the lack of information in the financial reports and to the accounting deficiencies found as a result of the analysis by the Consultants.

The accounts presented by Sonangol were prepared in Kwanzas and do not take into consideration the effects of inflation. Since Angola has a hyperinflationary economy, as defined in point 29 of the IAS, the application of this standard is of enormous importance. The absence of inflationary adjustments to the accounts distorts any analysis done by a reader of the accounts in Kwanzas. In order to help make a meaningful analysis of the accounts, these were converted to American Dollars at year end exchange rates. The accounts, as presented by Sonangol, are basically an aggregate of several businesses performed by the Group under the guise of their oil and gas activities, distribution and aeronautics. The accounts of subsidiaries and associates of the company were not consolidated into the report.

¹⁸ PriceWaterhouseCoopers

After the creation by Sonangol of a pensions fund for its employees, the company did not take any accounting provisions to cover the costs that it will incur due to this new benefit scheme. As a result, the net profit according to the report on the results was declared in excess due to the omission of this cost. Besides, the passive in the balance sheet was underestimated due to the omission of this cost, which was being owed and was payable. During the year 2000, Sonair acquired some aircraft, but their ownership is not clear due to lack of information in the financial reports.

Crude revenues are undervalued by \$30,269 million, of which \$19,275 million correspond to the present year. This declaration by defect of the revenues is due to the fact that Sonangol has not yet invoiced and recorder, in Block 0, the value of a "lifting" made by partners in that block.

At the date of the conclusion of the limited revision to the accounts carried out by the auditing firm PriceWaterhouseCoopers, several answers to routine requests to Sonangol's banks, to confirm any balances held in Sonangol's name, were still pending. Besides, included in the responses from banks actually received, there were details of several bank accounts in Sonangol's name, such as at Lloyds, which did not appear in Sonangol's accounting books.

The Sonair accounts include an amount of approximately \$7.5 million relative to expenses for the Houston project. These expenses were not supported by any external documentation.

Sonangol has a large number of active bank accounts. The internal controls relative to the maintenance of these accounts are weak, including a considerable number of errors and differences to be documented, reconciled and confirmed.

As for the controls on capital investments, we found a number of investments that were undervalued in the financial reports. The investments were recorded with their historic cost, but there is no reference in the financial reports or any other notices as to their present market value. There isn't any proof that Sonangol has ever asked or received financial reports form these companies, in order to evaluate the growth in value of its capital participations.

The Sonangol group suffers from a generalized lack of internal controls relative to its operational results and costs in its three main activities — oil, gas, distribution and aeronautics.

6.2. Accounting Practices of the BNA

The BNA has not installed adequate control procedures to safeguard the bank's fixed assets against loss or misuse. The procedures manuals that exist haven't been updated for some time. Also there are no procedures manuals for all the areas in use of the bank, so as to standardize the operations and verify conformity with those same procedures.

Ernst & Young's auditors observed that the BNA employs a big number of employees, of which a large number does not have sufficient or useful qualifications, and there are no formal descriptions for the functions of each job.

To date, the BNA has not implemented a budget control system, and therefore it is not possible to apply meaningful revenue and expense policies. The lack of a budget also exposes the bank to the risk of inefficient attribution of resources. The BNA has not implemented policies and procedures to effectively manage the exchange rate risk. The management of foreign currency reserves is not regulated by a clear policy. The procedures used at the bank are not adequate to guarantee that the bank has sufficient control on its bank balances held abroad.

The results of an analysis performed on the bank's accounts show that some of the bank's accounts have not been reconciled, that there are accounts for which the bank never received bank statements, that some accounts were frozen and taken to court and that no provisions were taken about them. There is a large number of bank accounts that are not being used any more. There is also a large number of reconciliation articles and no proof that these were or are being investigated in order to solve them.

The procedures followed in the processing of fixed and time deposits are week, since there is no accompanying guarantee that the conditions will be reconsidered at the date of expiration. Therefore there is the possibility of losing an opportunity if, for example, a deposit is renewed while the bank could have obtained better conditions elsewhere. The bank does not make reconciliations regularly between the Letters of Credit and the amounts recorded in the verification balance.

Ernst & Young observed that the two amounts (balances of the subledger and of the general ledger) are not identical. Besides, some amounts confirmed by foreign banks do not match the amounts presented by the accounting system and some accounts show credit balances while they are debit balances. The bank also does not have formal procedures for the management of opening, recording, confirming and controlling its Letters of Credit.

This process is controlled by two or more departments and the activities, functions, and responsibilities of each department are not clearly defined. BNA's controls relative to the registration of its foreign currency bonds do not guarantee that all bonds are registered. During an audit, it was observed that:

- Promissory notes: The processes were very disorganized, and the documents were not systematically archives. For the majority of expired notes, there isn't any proof that these canceled notes are actually in the bank's hands and will not be presented a second time.
- Money orders: In many cases, the only supporting documentation was a copy of the telex and there wasn't any document signed by the client with the money order.
- Documented remittances: The bank has no procedures to control that will guarantee that all payments to clients are clearly identified; for example, the bank still did not show a credit, while in reality the debt had already been paid.

The procedures implemented by the Central Bank do not guarantee that there are adequate controls relative to debit orders of the Treasury. From the analysis performed, we also observed the following:

- Debit orders are archived by ministry, without a summary of the amounts not yet recovered.
- The bank made a significant number of advances to several ministries, without the existence of a formal request for a loan and a loan contract, placing in doubt the precision, evaluation and integrity of the advances.
- A significant amount of external debt exists that is not recorded in the banks books, due to the fact that it has not yet been clarified whether the debt is the bank's or the government's. Without a clear definition of responsibilities, it is very difficult to determine in which books these debits shall be recorded.
- The bank has no written procedures relative to the issuance and removal from circulation of notes and coins.
- During the year, the bank included in its books the total contract price for the construction of 100 residential units. Since the construction of these residences was still being done at the end of the year, and the total cost had not yet been debited, this type of treatment had the effect of producing a declaration of an excess in assets and creditors.

Appendix I

TORS Ref #	Description of Reference Terms	In which Reports can the work (results) be found?	Chapter, page and/or appendix
a)	Study – Diagnostic will cover Evaluation of existing proven reserves and probable reserves, compiled in a modern database	Initial Report	Chap 2, pag 6-3
b)	Realization of projections about the evolution of the export prices of oil, the Angolan production, the exports and the corresponding revenues for the state. The projections for the last semester of the year 2000 and the year 2001	Quarterly reports	All
c)	Design, develop and install a monitoring system that will give the Government an exact and updated picture of the revenues collected.	Financial Model installed in the MinFin, supported by Quarterly Reports	-
d)	Comparative analysis between the real situation and the projections for the third and fourth quarters of 2000 and for the complete year 2001, containing a detailed explanation of the recorded variations between forecast and real situation.	Quarterly reports	All
e)	Evaluation of production, control and measurement of exports, information management, financial procedures and procedures related to the acquisition of goods and services.	Initial Report	Appendix B and C
4	Task 1 Evaluation of the Present Situation The first task of the Consultant will be to gather and evaluate the relevant information referring to the last year for which there is available information relative to estimates of existing and probable reserves, present and expected production volume, total export volume and values based on the export prices obtained, sharing of the oil and revenues between the operator companies, Sonangol and the Government.	Initial Report	Chap 2, pag 6-33 Chap 4, pag 59-107 Chap 5, pag 108-126
4	The information to be gathered shall include Sonangol's balance sheet and its most recent declaration of results, identifying separately Sonangol's activities upstream and downstream, and excluding the investments made in non-oil areas, since these do not affect the finances of its operations in the oil area.	Initial Report	Chap 6, pag 128-131

TORS Ref #	Description of Reference Terms	In which Reports can the work (results) be found?	Chapter, page and/or appendix
4	The final versions of reports of audits to the accounting of private operators and public entities, such as Sonangol and BNA, existing for the most recent years, which shall be obtained and analyzed.	Initial Report	Chap 6, pag 128-131 and appendix E
4	Special attention shall be given to financing mechanisms or collateral guarantees that affect the oil revenues including, for example, the "Cabinda Trust", The "Soyo Palanca Trust", the government-to government export credit lines guaranteed by oil, as well as situations of cross-linked debt between entities, such as Sonangol, BNA and the Ministry of Finance.	Initial Report	Chap 5, pag 120-126 and appendix F
5 a	The evaluation described in paragraph 4 shall include 4 distinct types of information and shall be organized accordingly: Physics-technical information related to oil reserves and production;	Initial Report	Chap 2, pag 6-33 and appendix A
b	Tax/contractual information detailing how the oil and/or the revenues derived from it shall be shared between Operators, Sonangol and State, based on the analysis of applicable laws and other regulations, concessions, contracts, executed alterations and official instructions and determinations, contractual instruments or agreements;	Initial Report	Chap 3, pag 35-56
с	Statistics of financial flows resulting from oil production (real revenues, as opposed to theoretic revenues used in paragraph 5[b]); and	Initial Report	Chap 4 and 5, pag 59 and 126
d	An analysis of the disbursements of all oil revenues received by Sonangol and the State, respectively, as well as the inherent financial flows and amounts to be had between them.	Initial Report	Chap 5, pag 59-126
6	The projections The consultant shall prepare projections of the oil operations for the next 5 (five) years, based on the information mentioned in paragraphs (4) and (5), processing it in conjunction with information originating in other sources, as needed. The projections shall include specifically the following:	Quarterly reports	All
a	In the case of oil companies who are part of a joint-venture: quantity and quality of oil produced and sold, exports, prices obtained in the export transactions, annual gross revenues, costs of production and general expenses, amortization costs (including prospecting, exploration, development, installation and infra-structure expenses), costs resulting from social activities	Quarterly reports Qi to Q6 and appendixes	All

TORS Ref #	Description of Reference Terms	In which Reports can the work (results) be found?	Chapter, page and/or appendix
	or of different nature performed by the companies at the request of the Government and that are deductible from the taxable revenue, tax deductible production and investment incentives, other fiscal incentives, profits, bonus, taxes and other dues to the Treasury, capital expenses and their financing, direct investment, imports of goods and services, and loans.		
b	In the case of companies that are producing or preparing to produce oil under the PSA's agreements, in addition to the agreements mentioned before, the projection shall also include a detailed description of recoverable costs (cost oil), a declaration of sharing of "profit oil" for each field, and also the tax on revenue divided by each company.	Quarterly reports Qi to Q6 and appendixes	All
c	In the case of Sonangol, the projections shall include all the pertinent information for the declaration of demonstration of results relative to upstream operations. In addition to the information described before, and depending on the type of agreement, the projections shall include in detail the payments and the amounts to be shifted between the Government and Sonangol including: taxes, "profit oil", subsidies and other current expenses made by Sonangol at the request of the Government, and charges to be financed by the Government out of its part of the "profit oil" and retained by Sonangol in payment of its quality supervision services as National Concessionaire. In the case of oil loads identified for the service of the debt, the creditor and the objective of the corresponding debt shall be described, as well as the amount still owing, assignment of future loads and responsibilities of Sonangol before the operators, for example, relative to the expensed to be made under the PSAs.	Quarterly reports Qi to Q6 and appendixes	All
8	Monitoring and Reports During Phase 1 of the project (the main effort, estimated as 18 months), the consultant in cooperation with the Angolan counterparts shall monitor the evaluation of objective data relative to the oil revenues and its correspondence with the projections, including an evaluation of the impact of any subjacent variables (such as price) starting with the assumptions subjacent to the projections, shall execute the updating of the projections in conformity with paragraph (6), and shall submit to the Government a monthly report with	Quarterly reports Financial Report	

TORS Ref #	Description of Reference Terms	In which Reports can the work (results) be found?	Chapter, page and/or appendix
	conclusions. The monitoring shall be based on all information originating from sources and uses related with oil, including those mentioned in paragraphs (4) and (5), the accountings maintained by the companies, by the Direcção Nacional do Tesouro (Treasury) and by the BNA, in existing reports published or not, and in physical confirmation when necessary.		
9	The consultant shall: develop a manual for the use of the Angolan team nominated by the Government (following opinion of the Consultant as for its composition and relations) as responsible for this effort and train the Angolan counterparts on the procedures to be used in order to increase their efficiency as a key point inside the Government, intended to supply updated information at each moment and make the forecast and monitoring of the oil revenues of the country. The consultants shall also supply manuals for the use of the monitoring system and database developed for this project, manuals for the preparation of forecasts such as described in paragraph (6), manuals for the acquisition of goods and services, as well as other manuals that the consultant and his Angolan counterparts may identify as useful in the course of the project.	Financial Model Final Report	Appendixes
10	The consultant shall prepare the first Quarterly Report presenting the main conclusions of his initial evaluation, approximately two months after the start of the project. This and all subsequent reports shall be supplied to the Government with copy to the IMF (International Monetary Fund) and to the World Bank. The report shall include in graphical form the financial flows in the oil sector (private and public), the State's General Budget and the rest of the world.	Quarterly reports	All
11	Based on the available information for the first complete year after the start of the project (2001), the consultant shall supply to the Government after the end of that year, as soon as possible and not exceeding eighteen months after the start of the project, a comprehensive Final Report and shall send copies of it to the IMF (International Monetary Fund) and to the World Bank. This final report shall include an update of the database, an analysis of the last balance sheet and of the most recent report of Sonangol's results, including the	Final Report	

TORS Ref #	Description of Reference Terms	In which Reports can the work (results) be found?	Chapter, page and/or appendix
	separation of Sonangol's activities upstream and downstream, not related with oil, as well as a detailed description of the monitoring system created and implemented during the project.		
a	Recommendation of protection measures namely against: errors in the declaration of crude oil exported, exaggerated unit costs of production, operation costs and costs for the development of new fields; inclusion of non-authorized costs in the recovery costs account; manipulation of the water content in the exported crude oil; introduction of non-authorized alterations in the supervisory procedures; erroneous declaration on the calculations of overstays of oil tankers or of reserves; attribution of contracts for the acquisition of goods and services without a bidding process or on a basis that is not that of free competition; and any other fraudulent or non-professional practice that can be considered as worthy of attention;	Final Report	Appendix
b	A proposal containing the institutional, legislative or regulatory changes that can contribute to improve the transparency with which the financial and financing transactions related to oil are performed. Including especially a revision of the procedures of the "Petroleum Account" and, if necessary, proposals for its adjustment, as well as about the institutional and reporting relations of the team responsible for its operation; the proposals shall also contain subjects such as the "Cabinda Fund" and the "Soyo Palanca Fund".	Final Report	Appendix
с	A description of the Manual or Manuals developed for the use of the Angolan counterparts in what is related to the Petroleum Account, forecasting, database management, and any other that can be developed during the course of the project; and	Final Report	Appendix
d	A complete description of the training activities, both "on the job" and in class, performed during the project, and the recommendation of actions for future training and reinforcement of the institutional capacity that shall be carried out after the conclusion of the project.	Final Report	Appendix
12	Phase II: Maintenance and Monitoring After the completion of Phase I of the project, the consultant shall maintain (for approximately 12 months) a reduced activity, but sufficient to assure the	After Final Report	

TORS Ref #	Description of Reference Terms	In which Reports can the work (results) be found?	Chapter, page and/or appendix
	maintenance of the database and to complete the training tasks.		
n/a	At the end of the first three Quarters a report shall be presented. (In these reports the consultant shall describe the situation from the point of view of sustainability, suggesting changes necessary to assure that the system can be managed without major problems).	Quarterly reports Qi to Q6 (Q7 report in preparation)	
n/a	Immediately after the end of Phase II a final report shall be presented with conclusions.	Not done yet	