IEITI

6th Report of the

IRAQI

EXTRACTIVE INDUSTRIES TRANSPARENCY INITIATIVE

2014

pwc

April
2016

www.ieiti.org.iq

Iraqi Extractive Industries Transparency Initiative (IEITI)

Oil Export, Local Consumption and Field Development

Report 2014

December 2015

pwc

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Acknowledgment

This report is based on the efforts and inputs of many parties, where without their esteemed contributions, the report would not be as much as comprehensive as it is currently.

We would like to thank the IEITI National Secretariat, the World Bank delegates, Iraqi Ministries and its related entities, International Oil Companies Operating in Iraq, and International Crude Oil Buyers.

IEITI Stakeholders' Council

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Executive Summary

Executive Summary

a. On 10 February 2010, Extractive Industries Transparency Initiative (EITI) Board accepted Iraq as an EITI Candidate country. The first EITI report was published in December 2011. On 12 December 2012, Iraq was announced as an EITI compliant country.

b. As part of the continuous implementation of the Extractive Industries Transparency Initiative (EITI) in Iraq, reconciliation would need to include the following:

- revenues and payments reported by Iraqi governmental entities, international crude oil buying companies and international oil field developing extractive companies operating in central and Southern Iraq (excluding KRG)
- oil production and oil export quantities reported by Iraqi governmental entities, national and international oil companies operating in Central and Southern Iraq (excluding KRG), in addition to third party verification companies
- oil and gas quantities for local consumption reported by Iraqi governmental entities, national gas companies, national oil companies, electricity generation directorates and refineries
- mining production quantities reported by Iraqi governmental entities and national mining companies
- Net revenue from sale of oil products to the local market as reported by Ministry of Finance and Oil Products Distribution Company.

c. This report summarizes the results of these reconciliation processes, in addition to, information pertaining to the Oil and Gas Sector and the Extractive Industries in Iraq. It does not include reconciliation of data related to the extractive industries (including oil & gas) in Kurdistan Region. This data was requested from the Kurdistan Regional Government but it was not provided, however, IEITI Stakeholder Council has requested the inclusion of information about the extractive industry in KRG based on publicly available information. Chapter 6 of the report was dedicated for that purpose and all information included in that chapter was based on information obtained through searches made on public websites and resources with references included as footnotes. Accordingly, the information included in that chapter were not subject to the data collection and reconciliation processes adopted for purposes of this report. IEITI Stakeholder Council assumes no responsibility for the information contained in Chapter 6.

d. The report covers Iraq's crude oil export sales as reported by Iraqi Oil Marketing Company (SOMO), which formed most of Iraq's federal budget and foreign exchange earnings for 2014. It covers as well all payments made and revenues received with regard to crude oil exports during the financial year 2014, which amounted to **USD 70.9 billion**, and had resulted from crude oil sales to **40** international crude oil buyers. In addition, the report covers the reconciliation of the internal service payments made by the Government of Iraq as reported by the national oil companies and the Ministry of Oil.

e. Oil and gas production and the related cost recovery, signature bonuses, remuneration fees and corporate taxes were also covered in this report for the year 2014. Total crude oil production during 2014 amounted to 1,054.6 million barrels produced from all operating oil fields in Iraq except for the Kurdistan Region as we were not provided with the required information by KRG. Exported crude oil quantities amounted to 918.1 million barrel and crude oil quantities supplied to refineries and electricity generation directorates amounted to 187.8 million barrel and 40.8 million barrel respectively.

f. According to the Ministry of Planning, Crude Oil activity contribution represents 71% of total GDP which reflects significant depending on crude oil activity.

g. Based on the U.S. Energy Information Administration - Country Analysis Brief of Iraq, The Iraqi government has set ambitious oil production targets. The government is currently renegotiating field production targets set in Technical Service Contracts (TSCs) previously signed with international oil companies (IOCs). Based on some of the target revisions that have already been announced, the Energy Intelligence Group estimates that Iraq is now aiming for crude oil output of 7.0 million barrel per day by 2020, yet this target had been amended several times and being negotiated as to the date of this report.

Executive Summary (continued)

h. The Ministry of Oil in Baghdad oversees oil and natural gas development and production in all but the Kurdish territory through its operating entities, the North Oil Company (NOC) and the Midland Oil Company (MDOC) in the north and central regions, and the South Oil Company (SOC) and the Missan Oil Company (MOC) in southern regions. In the Iraqi Kurdistan Region, the KRG, with its Ministry of Natural Resources, oversees oil and gas development and production. International oil companies (IOCs) are very active in Iraq, including the Iraqi Kurdistan Region. IOCs operate under technical service contracts (TSCs) in Iraq, which are signed with the Ministry of Oil in Baghdad, and under production-sharing agreements (PSAs) in the Iraqi Kurdistan Region signed with the KRG.

i. Reconciliation of net revenue from sale of oil products to the local market was performed between the amounts reported by the Ministry of Finance and the Oil Products Distribution Company.

j. Reconciliation differences disclosed in this report are mainly attributed to timing differences in recording transactions by the different entities. In addition, some of these differences are attributed to adopting a cash basis of accounting instead of accrual basis of accounting.

k. The Stakeholder Counsel of the Iraqi Extractive Industries Transparency Initiative (IEITI) has reviewed and provided a commentary regarding the draft report of year 2014. On 8 December 2015, the Stakeholder Counsel held a meeting during which the draft report was presented, discussed and approved, except for Mining and KRG sections which were approved on 14 March 2016.

l. The table below shows a total difference of USD 647 million between the data as reported by SOMO and the buyers. This difference represents the total summation of several differences between buyers and SOMO. These differences were explained during the course of the reconciliation process. Please refer to section 3.6 for further details.

Amount Reported by SOMO USD	Amount Reported by Buyers USD	Differences explained USD	Without reporting from counterparty USD
70,934,024,818	70,286,995,101	647,029,716	-

m. Furthermore, the table below shows a difference of USD 6,553 million between data reported by Petroleum Contracts & Licensing Directorate (PCLD) and the data reported by the International Oil Companies (IOCs) with respect to cost recovery and remuneration fees. This difference was explained during the course of the reconciliation process. Please refer to sections 3.13 and 3.14 for further details.

Cost Recovery

Amount Reported by PCLD USD	Amount Reported by IOCs USD	Differences explained USD	Without reporting from counterparty USD
16,342,252,014	10,476,569,463	5,865,682,551	-

Remuneration

Amount Reported by PCLD USD	Amount Reported by IOCs USD	Differences explained USD	Without reporting from counterparty USD
1,074,360,832	386,444,185	687,916,647	-

n. Regarding signatures bonus payments related to the fourth licensing round, there were no signature bonuses payments made during 2014 related to previous licensing rounds.

Executive Summary (continued)

o. As for internal service payments reconciliation, there were no discrepancies in the data reported by the Ministry of Oil and national oil companies. This is clearly illustrated in the table below.

Amount report by MoO USD	Amount reported by National Oil Companies USD	Differences explained USD	Without reporting from counterparty USD
801,844,053	801,844,053	-	-

p. The reconciliation processes carried out included many challenges especially for the part related to data collection. The inability to obtain the required information from some entities have posed significant challenges to reconciliation efforts. In light of these challenges, alternative reconciliation procedures were adopted and carried out. Our experience in that regard and the lessons learned from this process including recommendations for the future have been summarized and presented in Chapter 7.

q. The tables below shows total reported Crude Oil, Cost Recovery and Remuneration, Signature Bonus and Internal Service Payments for the previous years.

Crude Oil (remove buyers and non-governmental parties) and add government production quantities, exports, and local consumption

r. Total Crude Oil Export Sales values and its related reconciliation from IEITI first report (2009) till the latest report (2012) prior to the issuance of the current report.

Year	Amount reported by SOMO USD
2009	41,249,682,456
2010	52,202,645,106
2011	82,986,002,828
2012	94,032,633,453
2013	80,803,522,851

Cost Recovery & Remuneration

s. Total Cost Recovery and Remuneration values and its related reconciliation related to International Oil companies operating in Central and Southern Iraq (excluding KRG) from IEITI third report (2011) till the latest report (2012) prior to the issuance of the current report. The coverage initiated in year 2011 as it is related to the first year of occurrence of such transactions.

Year	Amount reported by PCLD USD
2011	4,539,654,383
2012	7,084,270,641

Year	Cost recovery USD	Remuneration USD
2013	9,126,755,469	810,872,913

Executive Summary (continued)

Signature Bonus

t. Total Signature Bonuses values and its related reconciliation related to International Oil companies operating in Central and Southern Iraq (excluding KRG) from IEITI second report (2010) till the latest report (2012) prior to the issuance of the current report. The coverage initiated in year 2010 as it is related to the first year of occurrence of such transactions.

Year	Amount reported by PCLD USD
2010	1,650,000,000
2011	-
2012	-
2013	80,000,000

Internal Service Payments

u. Total Internal Service Payments values and its related reconciliation from IEITI first report (2009) till the latest report (2012) prior to the issuance of the current report.

Year	Amount reported by MoO USD
2010	539,743,590
2011	1,378,381,283
2012	1,454,545,453
2013	1,817,187,809

Crude Oil Export Sales Barrel Prices

V. Crude oil export sales barrel prices had been fluctuating during year 2014, where they are based on international crude oil benchmarks prices and there is price differential taking into account the geographical location and quality. Meanwhile when Iraq set its crude oil prices has to take into consideration the oil prices of the alternative oil in the region to become more competitive.

w. The table below indicate the crude oil export sales barrel highest and lowest prices during year 2014.

	Barrel Price High/Low per Destination in US$			
	USA	Europe	Far East	South Africa
High	101	105	105	106
Low	63	45	61	64

Terms and Abbreviations

Terms and Abbreviations

API	The American Petroleum Institute gravity measure which indicates the specific Fahrenheit
Barrel	A quantity consisting of forty two (42) United States Gallons under a pressure of 14.7 pound per square inch and a temperature of sixty (60) degrees Fahrenheit
BCM	Billion Cubic Meter
BOE	Barrel of Oil Equivalent
FBSA	Federal Board of Supreme Audit
Calendar Month / Month	In respect of any month in a calendar year, a period commencing on the first day of that month and ending on the last day of the same month
Calendar Year / Year	A period of twelve (12) consecutive months commencing with the first day of January and ending with the last day of December, according to the Gregorian Calendar
Crude Oil	All hydrocarbons regardless of gravity which are produced and saved from the Contract Area in the liquid state at an absolute pressure of fourteen decimal seven (14.7) pounds per square inch and a temperature of sixty (60) degrees Fahrenheit, including asphalt, tar and the liquid hydrocarbons known as distillates or condensates obtained from natural gas at facilities within the field other than a gas plant
Destination	The place to which oil is shipped or directed
DFI	Development Fund for Iraq
Dinar or Iraqi Dinar or IQ	The currency of the Republic of Iraq
Dollar or US$	Dollar of the United States of America
Due date	The date on which an obligation must be repaid
Export Oil	A standard blend of crude oil of nearest quality to the crude oil stream produced from the field, out of which a contractor may lift at the delivery point for the value of its due service fees under the contract
Export Oil Price	The price per barrel of export oil that is free on board (FOB) at the delivery point

Terms and Abbreviations (continued)

FDI	Foreign Direct Investments
FOD	Field Operating Division
GDP	Gross domestic product
Government or GoI	The Government of the Republic of Iraq
HSE	Health, Safety and Environment
IEITI	Iraqi Extractive Industries Transparency Initiative
IAMB	International Advisory Monitoring Board
Internal consumption	Oil used for domestic purposes
IOCs	International oil companies (international field development oil companies)
JMC	Joint Management Committee
KRG	Kurdistan Regional Government
LC	Letter of credit
Loading Date	The date of flanges of the relevant offshore loading terminal(s) in Iraqi and Turkish seaports where a contractor may lift export oil
LPG	Liquid petroleum gas
MIM	Ministry of Industry and Minerals of the Republic of Iraq
MdOC	Midland Oil Company of the Republic of Iraq
MdR	Midland Refineries Company
MNR	Ministry of Natural Resources (KRG)
MOC	Missan Oil Company of the Republic of Iraq
MoF	Ministry of Finance of the Republic of Iraq
MoO	Ministry of Oil of the Republic of Iraq

Terms and Abbreviations (continued)

NA	Not Available
N/A	Not Applicable
NOC	North Oil Company of the Republic of Iraq
NR	North Refineries Company
OPEC	Organization of the Petroleum Exporting Countries
OPRA	Oil Proceed Receipt Account
PCLD	Petroleum Contracts and Licensing Directorate
Production Measurement Point / PMP	The point within the field as agreed by the parties, where the volume and quality of crude oil produced and saved from the field is measured
RFB	Remuneration fees per barrel
ROC	Regional Oil Company
Signature Bonus	The payment of a fee by an IOC to a host government, upon signing a concession license agreement (or technical service contract) with a national oil company or local oil company
SOC	South Oil Company of the Republic of Iraq
SR	South Refineries Company
SOMO	Iraq Oil Marketing Company. An Iraqi entity established under and governed by the laws of Iraq, and having monopoly on oil exports
Tax Year	The period of twelve (12) consecutive months according to the Gregorian Calendar for which tax returns or reports are required according to any applicable tax laws and regulations in Iraq
TPAO	Turkiye Petrolleri Anonim Ortakligi
MMSCFD	Million Metric Standards Cubic Feet a Day

Introduction

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1. Introduction

1.1 Background: the EITI and Iraq

1.1.1 The Extractive Industries Transparency Initiative (EITI) sets a global standard for transparency in the oil, gas and mining industries. EITI's objective is to achieve a standard for review, analysis and publication of revenue flow between extractive industry companies and governments. In this manner, EITI aims to promote transparency in order to prevent corruption, and to provide citizens with a basis for demanding a fair use of revenue. Transparency is also expected to attract and enhance foreign direct investments.

EITI in Iraq

1.1.2 In May 2008, the Government of Iraq made a commitment of implementing EITI. In January 2010, Prime Minister Nouri Al Maliki declared Iraq's commitment to EITI in an event launched by Iraqi Extractive Industries Transparency Initiative. In February 2010, the EITI International Board announced that Iraq became an EITI candidate country.

1.1.3 Iraq had about 143,069 million barrels of proven oil reserves and 3,158 BCM of gas reserves in year 2014. (Source: OPEC 2015 Annual Statistical Bulletin)

1.1.4 As part of its implementation of the EITI, the Government of Iraq committed itself to publishing all revenues from its export sales from the Oil Sector. In addition, international companies buying oil from Iraq shared the same commitment of publishing what they have paid to the Government. A Board of Trustees (IEITI Stakeholders Council), consisting of representatives of the Government of Iraq, Iraqi monitoring bodies, Iraqi Professional Unions, National Oil Companies, International Extractive Oil Companies and Iraqi Civil Society Organization, will review the reported information, which will then be published in an EITI report.

1.1.5 The first IEITI report was published in December 2011. On 9 August 2012, the IEITI Stakeholder Council agreed on a final validation report. The EITI Board had reviewed the report and on 12 December 2012 announced Iraq as an EITI compliant country.

1.2 The Iraqi Government's revenues from extractive industries in 2014

1.2.1 The extractive industries in Iraq are state-owned, where national oil and gas companies, national mining companies and SOMO are 100% state-owned, financed by the Government and their financial statements are audited by the Board of Supreme Audit. IEITI focuses on disclosing Iraq's revenues from export sales of crude oil, corporate taxes from extractive companies' signature bonuses from the IOCs and internal service payments. The scope of the initiative also includes crude oil used for internal consumption distributed to refineries, electricity generation directorates and national gas companies, in addition to revenues from the Mining Sector and net revenue from sale of oil products to the local market.

1.2.2 According to EITI requirement Number 3.8, (Revenue Management and Expenditures), it was supposed to report on central government payments to governorates and regions in Iraq, yet and due to the fact that 2014 Budget Law is not issued yet as to the date of this report, and actual payments are still under audit by the Federal Board of Supreme Audit also to the date of this report, hence we were unable to report on related disbursements in this regard.

1. Introduction (continued)

1.3 What cash inflows are included in the IEITI reconciliation for financial year 2014 and how has the process been governed?

1.3.1 This report covers Iraq's Financial Year 2014 crude oil export sales (including all payments made and revenues received), in addition to signature bonuses received from the IOCs.

1.3.2 The report presents disaggregate data from all extractive companies operating in Iraq, with the exception of KRG, in addition, it covers cash inflows from internal oil consumption and oil product sales to the local market and other mining industries, and disaggregate data from all governmental agencies, and the underlying data reported by companies and the Government. The reporting and reconciliation process have been governed by the reporting process terms of reference.

1.4 The discussion by the IEITI Stakeholder Council regarding materiality

1.4.1 During its meeting held on 19 April 2015, the IEITI Stakeholder's Council decided to adopt the following materiality level for the 2014 reporting process:

1. Crude oil buying companies are required to provide information on their purchases
2. IOCs are required to provide information on their signature bonuses, service payments and settled taxes
3. Crude oil and gas used for internal consumption should be declared by refineries, electricity generation directorates and national gas companies
4. Revenues and mining production quantities reported by the different entities operating in the Mining Sector

All discrepancies that equal to or exceed 0.5% should be analyzed and reported.

1.5 Content and objective of this report

1.5.1 This report summarizes the results of the sixth year's reconciliation of Iraq's 2014 petroleum and other extractive activities. The reconciliation is comprised of cash inflows for the fiscal year ended on 31 December 2014.

1.5.2 This report consists of nine chapters. Chapter 1 introduces the EITI and its objectives, Iraq's implementation of the initiative and the reconciliation logic and process presented in this report. Chapter 2 highlights oil field developing extraction activities – licensing rounds. Chapter 3 sets out the results of the reconciliation. Chapter 4 presents further transparency exercise. Chapter 5 presents Iraq's Mining Industry. Chapter 6 presents an insight on the extractive industries of KRG. Finally, Chapter 7 summarizes the lessons learned from the reconciliation process and Annex 1 lists all reporting entities that were involved in this reconciliation.

1.5.3 In this report, the amounts are stated in thousand US Dollars (US$), unless otherwise stated.

1. Introduction (continued)

1.5.4 The information presented is the responsibility of the reporting entities as listed in appendix 1. Procedures carried out by the reconciler do not constitute either an audit or review made in accordance with International Standards on Auditing or International Standards on Review Engagements, and therefore, we do not express any assurance on the reported data. Had we performed an audit or review made in accordance with International Standards on Auditing or International Standards on Review Engagements, other matters might have come to our attention that would have been reported to you. PwC assumes no responsibility whatsoever in respect to or arising from or in connection with the contents of this report to parties other than the IEITI. Accordingly, regardless of the form of action, whether in contract, tort or otherwise, and to the extent permitted by the applicable law, PwC accepts no liability of any kind and disclaims all responsibility for the consequences of any person acting or refraining to act in reliance on the contents of this report, or for any decisions made or not made which are based upon the contents of this report. If others choose to rely, in any way, on the contents of this report, they do so entirely at their own risk.

1.6 The Oil and Gas Industry in Iraq

1.6.1 Iraq is at the forefront of EITI implementation in the Middle East Region, following Yemen which is the only other country implementing EITI in the Region. In compliance with the UN sponsored Development Fund for Iraq (DFI), its Oil and Gas Sector is already under public scrutiny, in which the Ministry of Oil regularly publishes on its website and local media, all hydrocarbon production data and externally audited exports revenues.

1.6.2 Iraq's Oil and Gas Sector account for most of the GDP, public revenues and its foreign exchange earnings. It is, therefore, central to Iraq's fiscal position and critical to the vitality of the Iraqi economy and the ongoing reconstruction efforts of the country, particularly with regard to oil, gas, and power infrastructure and development. Crude oil accounts for 64% of Iraq's GDP for the year 2014.

1.6.3 Although Iraq has approximately 9.5% of the world's proven oil reserves (143,069 million barrels) and major natural gas reserves (at least 3,158 BCM, estimated to be 5% of the world total), actual oil production during the last ten years has only been around 2.0 - 2.4 million barrels per day. In the aftermath of the conflicts affecting Iraq in the 1990's and especially during the last ten years, oil production has plummeted. Production, transport, storage and export infrastructure have greatly suffered over the past two decades. This is due to the lack of proper and appropriate maintenance in place, which had resulted from the lack of capital for its development and, naturally, from war-related damages and acts of sabotage.

1.6.4 The Government of Iraq is focused and committed to the sound management and optimal performance of the Oil and Gas Sector, being the principal driver of the Iraqi economy. This includes prioritizing policy for the Oil and Gas Sector, adapting the legal framework to the global energy environment, and sustaining efforts to rehabilitate the country's oil production, transport, storage, and export infrastructure. Therefore, the Government considers that only the full and optimal development of its oil and gas reserves will enable Iraq to fully benefit from its large resource base, in a manner commensurate with its unrealized potential. In this respect, the efforts of the Government of Iraq to award service contracts to International Oil Companies (IOCs) through four rounds of bidding, which were held in June 2009, December 2009, October 2010 and May 2012, had facilitated and enabled the country to develop new oil and gas fields, reverse declining output, and increase production from its existing oil and gas fields.

1. Introduction (continued)

1.7 Constitutional and legal framework for the oil sector in Iraq

The Iraqi Constitution

1.7.1 Oil and Gas in Iraq's constitution are dealt with under Articles 111 and 112, as well as Article 110, which relates to international trade. Article 111 states that "oil and gas are owned by all the people of Iraq in all the regions and governorates." According to the perspective of the Federal Government, this means that no governorate, region or ethnic group within Iraq's territory has the right to unilaterally exploit hydrocarbon reserves and that oil and gas activities in provinces and regions are undertaken with the consultation of the Federal Government, which has primary authority over oil and gas activities.

1.7.2 The primacy of the Federal Government over energy policy is highlighted by the wording of the first part of Article 112, which notes that the "Federal Government acts with the producing regions" as well as having the responsibility to distribute revenues to the rest of the country by population. The interpretation of this is that the placing of the Federal Government as the subject of the sentence suggests primary authority. Article 112 also states that the constitutionally mandated call for a balanced distribution of oil revenues to different parts of Iraq "shall be regulated by a law." This implies a single law rather than a series of laws, suggesting that the Federal Parliament would pass such a law.

1.7.3 The second part of Article 112 refers to the strategic development of Iraq's energy sector, but also emphasises that the Federal Government is "acting with" the regions and governorates. These Articles outline a framework of cooperation in the energy sector, rather than a situation where governorates and regions formulate policy independently.

1.7.4 According to the Federal government, Article 111 is reinforced by Article 110 of the constitution, which states that the Federal Government has exclusive authority to determine foreign sovereign economic and trade policy, in addition to "regulating commercial policy across regional and governorate boundaries within Iraq."

1. Introduction (continued)

1.8 Institutional Framework for the Petroleum Sector in Iraq

1.8.1 The Ministry of Oil is at the apex of the Oil and Gas Sector of the Federal Government, where it handles all aspects pertaining to policy, regulation, exploration, production, marketing of oil and gas.

1.8.2 In addition to the Ministry of Oil and Oil Marketing Company (SOMO), the key components of this structure includes:

- South Oil Company
- North Oil Company
- Missan Oil Company
- Midland Oil Company

1.8.3 In addition, other major components include exploration and drilling, research and development, transport, pipeline companies, refinery companies, gas companies, storage and export terminals among others.

1.8.4 The latter, although called "companies", possess some degree of operational autonomy, but are not as of yet, independent corporate structures in the generally accepted sense. Indeed, the Iraqi Government has plans for major reforms including (i) the reorganization of the Ministry of Oil functions and structures, (ii) Public-private partnerships with 'Bona Fide' international operators, in addition to strategic alliances with international oil companies, both upstream and downstream of the value chain.

1.8.5 The current type of the centralized structure, where the Government through the Ministry of Oil owns, produces, transports, sells and accounts for all the oil produced and exported or used domestically, is a comparatively unique framework amongst the current EITI countries, and in which it poses certain implications of how EITI is designed and implemented in Iraq, as discussed further below.

1.8.6 Central Iraq's Oil and Gas Sector is dominated by the four National Oil Companies and in which the Government is the major operator. Nonetheless, many IOCs are moving in by means of service contracts, in order to improve hydrocarbon production from existing producing fields. Other IOCs are moving in as well holding production service contracts in promising exploration and production areas.

1.8.7 These activities will substantially increase the need to reconcile "payments and revenues" in accordance with the EITI's criteria, which were developed and tailored to reflect the evolving state of upstream oil and gas exploitation in Iraq. This is also where metering at critical points of the chain is of the essence. Moreover, the Ministry of Oil will need to adhere to such rigorous criteria for downstream activities, in which they were also tailored to match Iraqi's current situation.

Field Developing Extraction Activities - Licensing Rounds

2

2. Field Developing Extraction Activities - Licensing Rounds

Overview of the Licensing Rounds in Iraq

The federal Government of Iraq had entered into a Technical Service Contract for the rehabilitation of its oil fields, in order to increase its productivities and to maximize the revenues for the benefit of the people of Iraq.

Technical Service Contract, or TSC, refers to an oil and gas exploration and production contract awarded by a producing country to the International Oil Company (IOC) bidding with the lowest remuneration fees per barrel (RFB) produced as reward of its capital and operational expenditures.

The government of Iraq had conducted its four licensing rounds between the years 2009 to 2012.

By early 2008, International Oil Companies (IOCs) were invited to pre-quality for a bidding process. Many experts in resource transparency regard the bidding process as the most effective way to manage both the dangers of corruption and asymmetry of information between governments and companies at the production award stage.

On April 13, 2008 the Government announced some thirty five international companies (including most of the so-called "majors" had passed the pre-qualification stage) out of a total of one hundred and twenty companies who applied. The Government announced that there would be two main criteria in which all bidders would be assessed. First, the production plateau offered by a consortium for any given field, where the higher the production they were guaranteeing the better. Second, the remuneration fee the consortium would accept per barrel it will produce once it reached the plateau – the lower the fee, the higher the companies would score.

The first licensing round had been announced on 30 June 2008, and its related biddings took place on 30 June 2009. The only award made as a direct results of the auction round was to BP, in association with Chinese CNPC, for the Rumaila field.

The second licensing round offered by the Ministry of Oil took place on 11-12 December 2009. Ten major oilfields were up for bid in the second round, which produced deals for seven of those fields. The fields receiving successful bids were Halfaya, Majnoon, Qayara, Badra, Garraf, Najmah and West Qurna 2. The three fields receiving no bids were East Baghdad, the Eastern Fields and Middle Furat.

After launching its first and second licensing rounds in 2009, Iraq held its third licensing round on 20 October 2010 for three gas fields: Akkas, holding an estimated 158 billion cubic meters (bcm) of natural gas, Mansuriya, holding approximately 130 bcm, and Siba, holding about 31 bcm.

Iraq's fourth licensing round took place on 30 -31 May 2012 and included areas that have not yet been explored, as well as newly discovered fields that have not been exploited (Virgin Oil Fields).

Iraqi Oil Exploration Company major activities

The Iraqi Oil Exploration Company is involved in Licensing Rounds, by being the State Partner in four contracts (West Qurna - Phase 1, Badrah, and Mansuriya). Furthermore, it participates in the exploration activities of other contracts, such as Block 8, 9, 10 and 12.

During year 2013, the company had several activities according to its plan for the year, which can be summarised in the following table:

2. Field Developing Extraction Activities - Licensing Rounds

#	Activity		Planned	Executed	Execution Percentage
1	Geology Commission / Evaluation, Exploration, Labs (KM)		1703	1692	99%
2	Processing and Explanation Commission / Data Processing in 3D (KM2)		500	629	126%
	Processing and Explanation Commission / Data Processing in 2D (KM Length)		20949	20606	98.5%
3	Processing and Explanation Commission / Seismic Explanation in 3D (KM2)		3007	2882	96%
	Processing and Explanation Commission / Seismic Explanation in 2D		71157	71157	100%
4	Fieldwork Commission / Seismic Surveys (KM Length)	KM Length	1435	1756	122%
	Fieldwork Commission / Seismic Surveys (KM2)	KM2	1369	1456	106%
5	Information Technology Commission / Data Bank		1200	1205	100%

The remaining of this chapter was prepared by the Iraqi Ministry of Oil - Petroleum Contracts and Licensing Directorate (PCLD).

2.1 Ministry of Oil policy for the development of oil fields under service contracts for oil fields licensing rounds

2.1.1 Iraq owns around 143 billion barrels of confirmed oil reserves, which represents approximately 9.5% of the aggregate oil reserves in the world. In addition, according to a recent study by geologists, the western and southern desert might contain an even larger oil and gas reserve. Iraq ranks third in terms of oil reserves, behind Saudi Arabia and Iran, however Iraq's crude oil production has suffered significant damages due to the political unrest over the past 30 years denoted by wars, economic blockade, inadequate investment, migration of many administrative and technical staff, in addition to an outdated infrastructure that does not match production capacities.

2.1.2 The extractive sector in Iraq is considered the main source of crude oil production, therefore it is regarded as the country's key source of financial resources and the driver of economic and national development. The Iraqi Government has resorted to launching licensing rounds of oil and gas fields as well as exploration blocks to obtain the assistance of international oil companies in the redevelopment of existing production fields.

2. Field Developing Extraction Activities - Licensing Rounds

2.1.3 On 30 June 2008, the Ministry of Oil officially announced in Baghdad phase 1 of the licensing rounds, which involved assigning the development of certain oil producing fields to international oil companies in a competitive and fair manner.

2.2 Licensing rounds are set to be implemented as follows:

2.2.1 Phase 1:

2.2.1.1 Companies wishing to participate in the licensing rounds submit their documents for qualification purposes, whereby they are evaluated based on 5 aspects:

1. Legal
2. Financial
3. Technical
4. Health, Safety and Environment
5. Training and Development

2.2.1.2 In order for any company to qualify, it has to comply with all 5 aspects, whereby the failure to comply with any of these requirements results in disqualification from participating in the licensing round.

2.2.2 Phase 2:

2.2.2.1 Setting up a promotional conference to explain the basic features and technical aspects of the contract, as well as answer questions asked by the participating companies. After that, the information pack is released, which includes a preliminary draft of the service contract, technical information specific to the disclosed fields, in addition to the preliminary tender document. The qualified companies are then given sufficient time to study this material and submit their inquiries and suggestions to the Ministry of Oil. Subsequently, a workshop is set up with the attendance of all qualified companies that purchased the information pack in order to discuss all inquiries, whereby answers are provided by the related parties at the Ministry of Oil. The draft is then adjusted accordingly and the final service contract is released along with the final tender document. Such documents will thereafter be the basis on which competitive offers are provided to the participating companies.

2.2.3 Phase 3:

2.2.3.1 The assignment of contracts in accordance with an economical competitive standards. The contracts* are assigned at the same time and in front of the media and the attendees.

2.2.4 Phase 4:

2.2.4.1 After obtaining the approval of the Iraqi Cabinet, the assigned contracts are signed in order to start execution.

2.2.4.2 Ministry of Oil aims to reach a production capacity of 7 million barrel per day by 2020, in addition to increase the current refining capacity and enhance transport, storage, and export systems, yet this target had been amended several times and being negotiated as to the date of this report.

2.2.4.3 Achievements during the first three years (until the end of 2014) after implementing the contracts that resulted from executing the licensing rounds can be summarized as follow:

1. Increase production capacity from 1,645 thousand barrel per day in 2009 to average of 2,113 thousand barrel per day in 2014.

2. Field Developing Extraction Activities - Licensing Rounds

2. Iraq's revenues from the sales of crude oil from licensing rounds' fields (Al Rumailah, Al Zubair, West Qurna (Phase1), Maysan, Halfaya, and Ahadab) was around USD 84 billion during the year 2014. And according to oil prices listed by Iraqi Oil Marketing Company bulletins.
3. International companies invested huge amounts of money for developing fields amounting to USD 28.9 billion for the period extending between year 2009 and 2014.
4. Complete the construction of new plants for crude oil treatment and with large capacity.
5. Complete the construction of two new pipes to distribute crude oil, the first one to transport crude oil from the Ahdab Field to Al Toba warehouse, and the second from Majnoon Field to Zubair -1 warehouse.
6. Build unloading wharf on Shatt al Arab in Al Nashwa Area for Majnoon Field.
7. Until the end of the year 2013 the excavation of several wells were completed in addition to other wells that are still under drilling.
8. Complete many dimensional seismic survey, like the surveys for Rumaila, Halfaya, Badra, Mansuriyya, and Ahdab fields. The work is still ongoing in Al Zubair, West Qurna (Phase1&2), Maysan and Al Seebeh fields.
9. Large numbers of mines and unexploded bombs remnants of war have been removed for an area of 491.3 square kilometers from the fields of Rumaila, West Qurna (Phase 2), Majnoon, Badra, and Maysan.
10. Many mines and unexploded bombs remnants of war have been removed from the fields of Rumaila, West Qurna (Phase 2), Majnoon, and Badra.
11. The environmental studies have been achieved for all contracted areas.
12. Most of fields' operators have fulfilled the minimum work commitments. The contracting companies have invested funds that exceeded the minimum level of expenses recorded in the contracts.
13. Many training courses have been held for Iraqi personnel in the extractive companies and in the Ministry of Oil inside and outside Iraq under the contractual article number 26 (Training Scholarship and Technology Transfer). Until the end of the year 2012, 237 training courses have been held with 2,607 Iraqi personnel participants, Training include the following:
    - Reservoir and production engineering
    - Excavation engineering
    - Oil and gas production
    - Surface plants and maintenance
    - Management and economics in the oil industry
    - Financial records
    - Geology, geophysics, and petrophysics
14. Field operators enhanced the social situation in villages located within or around contracting areas. Medical centers have been rehabilitated or equipped with unavailable supplies, schools have been reformed and provided with the necessary supplies and equipment, roads have been paved and some bridges have been rehabilitated, drinking water stations have been set up, in addition to hiring local talent in areas of specialization or as part of the security.
15. The entrance of global oil service companies to the Iraqi market, which helped recruit large numbers of Iraqi personnel.
16. The participation of oil service companies (affiliated with Ministry of Oil) in the implementation of many tasks. This includes carrying out a two-dimensional and a three- dimensional seismic survey by Oil Exploration Company, drilling wells by the Iraqi Drilling Company, setting up a pipeline to transport crude oil from Majnoon Field to Zubair -1 warehouse by the State Company for Oil Projects, all of which making Iraqi oil service companies a competitor to the global oil service companies.

2. Field Developing Extraction Activities - Licensing Rounds

17. The participation of Iraqi private sector companies in new business areas, such as environmental work, security, extending pipelines flowing to wells, as well as civil work related to wells or camps under the supervision of international companies, through which they can gain experience and skill.

2.3 The table below represents the contracts that resulted from implementing the licensing rounds:

Field	Ahdab	Rumaila	Zubair
Licensing round	First Licensing Round (2009)	First Licensing Round (2009)	First Licensing Round (2009)
Field partner	Al Waha Petroleum Co.Ltd.	BP & PetroChina	ENI & Occidental & Kogas
State partner	SOMO	SOMO	Missan Oil Company
Field operator	Al Waha Petroleum Co. Ltd.	BP	ENI
Contract sign date	10-Nov-08	3-Nov-09	22-Jan-10
Contract active date	10-Nov-08	17-Dec-09	18-Feb-10
Rehabilitation / Evaluation plan date	Jun-11	Sep-10	15-Apr-10
Rehabilitation / Evaluation plan approval date	-	Nov-10	Jun-10
Contract period	20 Years	20 Years	25 Years
First commercial production	Started in the third quarter of 2011 with a capacity of 25,000	1,066,000	182,778
Production for the year 2011 barrel / day	42,235	1,191,319	248,000
Production for the year 2012 barrel / day	116,470	1,345,557	260,000
Production for the year 2013 barrel / day	127,066	1,306,122	305,717
Production for the year 2014 barrel / day	131,251	1,243,852	301,786
Production peak barrel / day	140,000	2,100,000	850,000
Contracting companies shares	75% AL WAHA PETROLEUM CO.LTD. 25% SOMO	47.63% BP 46.37% PetroChina 6% SOMO	41.56% ENI 29.69% Occidental 23.75% Kogas 5% Missan Oil Company

Source: Ministry of Oil

2. Field Developing Extraction Activities - Licensing Rounds (continued)

Field	West Qurna (Phase1)	Missan (Al Bazerkan, Al Fakka & Abo Gharab)	Majnoon
Licensing round	First Licensing Round (2009)	First Licensing Round (2009)	Second Licensing Round (2009)
Field partner	ExxonMobil & Shell & PetroChina & Pertamina	CNOOCI & TPAO	Shell & Petronas Carigali
State partner	Oil Exploration Company	Iraqi Drilling Company	Missan Oil Company
Field operator	ExxonMobil	CNOOCI	Shell
Contract sign date	25-Jan-10	17-May-10	17-Jan-10
Contract active date	1-Mar-10	2-Dec-10	1-Mar-10
Rehabilitation / Evaluation plan date	19-Oct-10	Mar-11	May-10
Rehabilitation / Evaluation plan approval date	Nov-10	Nov-11	Oct-10
Contract period	25 Years	20 Years	20 Years
First commercial production barrel / day	244,000	88,000	175,000 (during the fourth quarter of 2013)
Production for the year 2011 barrel / day	257,329	-	-
Production for the year 2012 barrel / day	409,128	99,473 (during the fourth quarter of 2012)	-
Production for the year 2013 barrel / day	459,219	108,862	111,144
Production for the year 2014 barrel / day	360,863	113,728	193,949
Production peak barrel / day	1,600 (For seven years)	450,000	1,800,000
Contracting companies shares	32.7% ExxonMobil	63.75% CNOOCI	45% Shell
	32.7% PetroChina	11.25% TPAO	30% Petronas Carigali
	19.6% Shell	25% Iraqi Drilling Company	25% Missan Oil Company
	10% Pertamina		
	5% Oil Exploration Company		

Source: Ministry of Oil

2. Field Developing Extraction Activities - Licensing Rounds (continued)

Field	West Qurna (Phase2)	Al Gharraf	Halfaya
Licensing round	Second Licensing Round (2009)	Second Licensing Round (2009)	Second Licensing Round (2009)
Field partner	Lukoil	Petronas Carigali & Japex	PetroChina & Petronas & TOTAL
State partner	North Oil Company	North Oil Company	South Oil Company
Field operator	Lukoil	Petronas Carigali	PetroChina
Contract sign date	31-Jan-10	18-Jan-10	17-Jan-10
Contract active date	1-Mar-10	10 Febrauary 2010	1-Mar-10
Rehabilitation / Evaluation plan date	Preliminary in September 2010 Final in Febrauary 2013	Jun-10	Sep-10
Rehabilitation / Evaluation plan approval date	Nov-10	Nov-10	Dec-10
Contract period	25 Years	20 Years	20 Years
First commercial production	11 March 2014	Started in the fourth quarter of 2013 with a capacity of 35,000	Started in the third quarter of 2012 with a capacity of 70,000
barrel / day			
Production for the year 2012 barrel / day	-	-	70,000
Production for the year 2013 barrel / day	-	78,059	104,723
Production for the year 2014 barrel / day	260,877	84,133	140,051
Production peak barrel / day	1,200,000	230,000	400,000
Contracting companies shares	75% Lukoil 25% North Oil Company	45% Petronas Carigali 30% Japex 25% North Oil Company	45% PetroChina 22.5% Petronas 22.5% TOTAL 10% South Oil Company

Source: Ministry of Oil

2. Field Developing Extraction Activities - Licensing Rounds (continued)

Field	Badra	Al Najma and Al Qayara	Al Siba
Licensing round	Second Licensing Round (2009)	Second Licensing Round (2009)	Third Licensing Round (2010)
Field partner	Gazprom & Petronas & TPAO & Kogas	Sonangol	Kuwait Energy & TPAO
State partner	Oil Exploration Company	South Oil Company for Al Qayara Iraqi Drilling Company for Al Najma	Missan Oil Company
Field operator	Gazprom	Sonangol	Kuwait Energy
Contract sign date	28-Jan-10	26-Jan-10	5-Jun-11
Contract active date	18 Febrauary 2010	18-Feb-10	1-Jul-11
Rehabilitation / Evaluation plan date	Aug-10	-	Dec-11
Rehabilitation / Evaluation plan approval date	Jul-11	-	Jul-12
Contract period	20 Years	20 Years	20 Years
First commercial production	20 August 2014	Al Najma 20,000 Barrel / day Al Qayara 30,000 barrel / day	25 MMSCFD
Production peak	16,224 barrel / day	Al Najma 110,000 barrel / day Al Qayara 120,000 barrel / day	100 MMSCFD
Contracting companies shares	30% Gazprom	75% Sonangol	45% Kuwait Energy
	22.5% Kogas	25% South Oil Company for Al Qayara & Iraqi Drilling Company for Al Najma	30% TPAO
	15% Petronas		25% Missan Oil Company
	7.5% TPAO		
	25% Oil Exploration Company		

Source: Ministry of Oil

2. Field Developing Extraction Activities - Licensing Rounds (continued)

Field	Mansuriya	Akkaz	Exploration Block # 8
Licensing round	Third Licensing Round (2010)	Third Licensing Round (2010)	Fourth Licensing Round (2012)
Field partner	TPAO & Kuwait Energy & Kogas	Kogas	Pakistan Petroleum
State partner	Oil Exploration Company	North Oil Company	-
Field operator	TPAO	Kogas	Pakistan Petroleum
Contract sign date	5-Jun-11	13-Oct-11	5-Nov-12
Contract active date	18-Jul-11	15-Nov-11	5-Dec-12
Rehabilitation / Evaluation plan date	Dec-11	May-12	After informing the Midland Oil Company with the commercial exploration results
Rehabilitation / Evaluation plan approval date	May-12	Sep-12	-
Contract period	20 Years	20 Years	30 years for oil field & 40 years for gas field (Includes exploration period for 5 years)
First commercial production	80 MMSCFD	100 MMSCFD	After 3 months from the completion of the approved evaluation plan
Production peak barrel / day	320 MMSCFD	400 MMSCFD	-
Contracting companies shares	37.5% TPAO	75% Kogas	100% Pakistan Petroleum
	22.5% Kuwait Energy	25% North Oil Company	
	15% Kogas		
	25% Oil Exploration Company		

Source: Ministry of Oil

2. Field Developing Extraction Activities - Licensing Rounds (continued)

Field	Exploration Block # 9	Exploration Block # 10	Exploration Block # 12
Licensing round	Fourth Licensing Round (2012)	Fourth Licensing Round (2012)	Fourth Licensing Round (2012)
Field partner	Kuwait Energy & Dragon Oil Holdings Limited	Lukoil Overseas Iraq Exploration B.V. & Inpex Corporation	JSOC Bashneft & Premier Oil PLC
State partner	-	-	-
Field operator	Kuwait Energy	Lukoil Overseas Iraq Exploration B.V.	JSOC Bashneft
Contract sign date	27-Jan-13	7-Nov-12	8-Nov-12
Contract active date	27-Jan-13	3-Dec-12	1-Jan-13
Rehabilitation / Evaluation plan date	after informing the South Oil Company with the commercial exploration results	after informing the South Oil Company with the commercial exploration results	after informing the South Oil Company with the commercial exploration results
Rehabilitation / Evaluation plan approval date	-	-	-
Contract period	30 years for oil field & 40 years for gas field (Includes exploration period for 5 years)	30 years for oil field & 40 years for gas field (Includes exploration period for 5 years)	30 years for oil field & 40 years for gas field (Includes exploration period for 5 years)
First commercial production	After 3 months from the completion of the approved evaluation plan	After 3 months from the completion of the approved evaluation plan	After 3 months from the completion of the approved evaluation plan
Contracting companies shares	70% Kuwait Energy	60% Lukoil Overseas Iraq Exploration B.V.	70% JSOC Bashneft
	30% Dragon Oil Holdings Limited	40% Inpex Corporation	30% Premier Oil PLC

Source: Ministry of Oil

2. Field Developing Extraction Activities - Licensing Rounds (continued)

2.4 Tax structure for the standardized Technical Service Contracts* held in the four licensing rounds

2.4.1 According to the standardized Technical Service Contracts used in Iraq's four licensing rounds, the only tax liability of contractors (IOCs) operating under Technical Service Contracts shall not exceed corporate income tax levied at a rate not to exceed thirty five percent (35%) of the contractor's taxable profit under the law which shall, as between the contractors and the Regional Operating Companies (MoO entity), be deemed to be the Remuneration Fee received during the relevant tax year.

2.5 Signature bonuses received in year 2014

2.5.1 There were no signature bonuses payments made during 2014 related to previous licensing rounds.

2.6 Cost recovery and remuneration fees

2.6.1 According to Technical Service Contract, cost recovery and remuneration fees are defined as follows:

2.6.1.1 Cost Recovery: recoverable costs and expenditures incurred and payments made by Contractor and/or Operator in connection with or in relation to the conduct of Petroleum Operations.

2.6.1.2 Remuneration Fees: fees paid to Contractor for incremental production.

2.6.2 "The Remuneration Fee per Barrel of Crude Oil applicable for all Calendar Quarters during any given Calendar Year shall be determined on the basis of the R-Factor calculated at the end of the preceding Calendar Year for the Field as follows:"

R-Factor	Remuneration Fee per Barrel (USD)
Less than 1.0	Remuneration Fee Bid (RFB)
1.0 to less than 1.25	80%* RFB
1.25 to less than 1.5	60%* RFB
1.5 to less than 2.0	50%* RFB
2.0 and above	30%* RFB

Source: Technical Service Contract template

* *For the template of Technical Service Contract: http://www.ieiti.org.iq/uploads/tech.pdf*

2. Field Developing Extraction Activities - Licensing Rounds (continued)

2.6.3 Cost recovery and remuneration fees are calculated in accordance with article no. 19 of Development and Production Service Contract (http://www.ieiti.org.iq/uploads/deve.pdf). These payments are settled to field partner according to contract sharing percentage as the following articles quoted from the contract show:

> "19.2 Contractor shall start charging Petroleum Costs to the Operating Account as from the Effective Date, in accordance with this Contract and the Accounting Procedures, but the same shall be due and payable in accordance with Article 19.6.
>
> 19.3 Contractor shall become entitled to Remuneration and shall start charging the same to the Operating Account only from the date of First Commercial Production. For any Quarter commencing with the Quarter in which the First Commercial Production occurs, the Remuneration shall be an amount equal to the sum of:
>
> - The product of the applicable Remuneration Fee and Net Production, subject to the performance adjustment in Article 19.5 (that defines the remuneration fee entitlement and related calculation);
>
> - The product of the applicable Remuneration Fee and any Gas Processing Plant Products, expressed as BOE."
>
> "19.6 Petroleum Costs and Remuneration:
>
> - Petroleum Costs and Remuneration due to Contractor shall be paid without interest, in Export Oil at the Delivery Point unless the Contractor elects, by April 1st each Year, to receive payment in cash in Dollars for the following Year. For payment in cash, payment shall be made within sixty (60) days of the submission of an invoice pursuant to Clause 9 of the Accounting Procedures. For payment in Export Oil, the Export Oil Price shall be in accordance with Article 18 and liftings shall be scheduled in accordance with an agreement reached pursuant to Addendum Four. Any election shall remain in effect for the Calendar Year for which the election was made.
>
> - Petroleum Costs, Supplementary Costs and Remuneration shall be deemed to cover all costs, expenses, liabilities and remuneration to Contractor under this Contract. ROC shall not be obliged to pay any other compensation whatsoever to Contractor for the fulfillment of its obligations under this Contract.

2. Field Developing Extraction Activities - Licensing Rounds (continued)

- Petroleum Costs and Remuneration shall become due and payable upon invoicing starting with the Quarter in which the First Commercial Production occurs and shall be paid to the extent of fifty percent (50%) of the Deemed Revenue in accordance with the provisions of this Contract. Payment of due and payable Petroleum Costs shall have priority over the payment of due and payable Remuneration.

- Any due and payable Petroleum Costs and Remuneration that remain unpaid in respect of any Quarter shall be carried forward and paid in succeeding Quarter(s) until fully paid."

"19.7 Supplementary Costs:

- Contractor may start charging Supplementary Costs to the Operating Account as from the Effective Date, in accordance with this Contract and the Annex C.

- Supplementary Costs shall become due and payable starting with the later of the Quarter in which First Commercial Production occurs, or the Quarter in which the Supplementary Costs are first invoiced.

- Supplementary Costs due to Contractor shall be paid in Export Oil at the Delivery Point unless the Contractor elects, by April 1st each Year, to receive payment in Dollars for the following Year. For payment in cash, payment shall be made within sixty (60) days of the submission of an invoice pursuant to Clause 9 of the Accounting Procedures. For payment in Export Oil, the Export Oil Price shall be in accordance with Article 18 and liftings shall be scheduled in accordance with an agreement reached pursuant to Addendum Four. Any election shall remain in effect for the Calendar Year for which the election was made.

- Outstanding balances on all Supplementary Costs shall bear interest at LIBOR plus one percent (1%) from the date when Supplementary Costs are first invoiced until the date when they are received, provided that interest shall be fixed for each tranche of Supplementary Costs based on LIBOR prevailing as at the first invoice date.

- Supplementary Costs paid shall be deemed to cover all amounts due to Contractor for Supplementary Costs incurred.

- Recovery of Supplementary Costs shall be paid to the extent of sixty (60)% of Deemed Revenue less Petroleum Costs and Remuneration paid as follows:

Deemed Revenue * 60% - (Petroleum Costs paid + Remuneration paid)

- Any due and payable Supplementary Costs that remain unpaid in respect of any Quarter shall be carried forward and paid in succeeding Quarter(s) until fully paid."

2. Field Developing Extraction Activities - Licensing Rounds (continued)

2.7 Internal Service Payments*

2.7.1 Internal service payments are payments received by National Oil Companies (NOCs) to cover the production cost of crude oil. These payments are made by the Ministry of Finance to SOMO which in turn makes the required transfers to the NOCs on a monthly basis.

* *Source: SOMO*

2.7.2 Internal service payments are calculated as follows:

2.7.2.1 Estimated crude oil production cost allocation within the Government annual budget is the responsibility of the National Oil Companies (NOCs), these costs are calculated by multiplying the planned production quantity for the upcoming year and the estimated costs.

2.7.2.2 The Ministry of Oil transfers the allocations of crude oil production cost to SOMO, which will be paying the allocated amount to the NOCs as monthly payments and recording it as advanced payments.

2.7.2.3 At year end, the NOCs will calculate their actual cost of crude oil production for the year divided by actual crude oil production quantity to determine the actual cost/barrel of oil. NOCs add a certain percentage of profit margin determined by the Ministry of Finance.

2.7.2.4 Advances paid by SOMO will be settled after calculating actual crude oil production cost incurred during the year.

2.8 Employment, training and social expenditures under technical service contracts

2.8.1 Employment:

2.8.1.1 Technical service contract states that "The Contractor should be prepared to fill positions within the FOD as and where required upon the request of the JMC, provided however that the Companies shall have the right to fill up to 15% of the positions with secondees from Contractor, the remaining 85% shall be filled by ROC secondees and/or directly recruited through the FOD".

2.8.1.2 According to the Ministry of Planning, the Ministry of Oil's work force for year 2014 constituted 8.2% of the total work force of the Iraqi ministries and non-ministry related organizations, where the number of employees reached 127,741 which includes 59,437 specialized employees and technicians, while the number of employees working in oil production reached 29,204.

2.8.1.3 According to the Ministry of Planning, the Ministry of Industry and Minerals work force for year 2014 constituted 9.2% of the total work force in Iraqi Ministries and non-ministry related organizations, where the number of employees reached 138,049 which includes 25,079 specialized employees and technicians, while the number of employees working in production reached 73,832.

2. Field Developing Extraction Activities - Licensing Rounds (continued)

2.8.1.4 According to the Ministry of Oil/ Training and Development Directorate, the work force in the extractive industry for year 2014 constituted 3.45% of the total work force of Iraqi ministries and non-ministry related organizations, where the number of employees reached 53,311.

2.8.1.5 The table below represents the number and percentage of Iraqi and expatriate employees working at IOCs:

IOC	Number of national employees	Percentage of national employees	Number of expatriate employees	Percentage of expatriate employees
BP (Al Rumaila)	6,808	92.6%	546	7.4%
ENI (Al Zubair)	9	3.23%	270	96.77%
ExxonMobil (West Qurna 1)	NA	NA	NA	NA
Shell Iraq petroleum Development BV (Majnoon)	291	61%	187	39%
Total (Halfaya)	NA	NA	NA	NA
Sonangol (Qayarah)	18	81.8%	4	18.2
Lukoil (West Quran 2)	491	26%	1,378	74%
Petronas (Al Gharraf)	191	28%	481	72%
JAPEX (Al Gharraf)	1	100%	NA	NA
GAZ PROM (Badra)	96	26%	273	74%
CNOOC (Missan)	1,507	88.4%	198	11.6%
KOGAS (Akkas)	2	3%	65	97%
TPAO (Al Mansureya)	NA	NA	NA	NA
Kuwait Energy (Al Seebah)	44	99%	4	1%
Pakistan Petroleum Ltd (Exploration #8)	NA	NA	NA	NA
Bashneft (Exploration # 12)	3	27.3%	8	72.7%

Source: Respective entities

2. Field Developing Extraction Activities - Licensing Rounds (continued)

2.8.2 Training and social expenditures:

2.8.2.1 The table below shows the value of training support and social expenditures made by IOCs during year 2014:

IOC	Training support (US$)*	Social expenditures (US$)
BP (Al Rumaila)	28,372,673 (a)	1,229,408 (b)
ENI (Al Zubair)	12,424,986	86,308
ExxonMobil (West Qurna 1)	14,428,691	NA
Shell Iraq petroleum Development BV (Majnoon)	826,913 (e)	2,208,786 (f)
Total (Halfaya)	768,198	NA
Sonangol (Qayarah)	379,912	-
Lukoil (West Quran 2)	9,151,784	320,636
Petronas (Al Gharraf)	2,661,552	422,761
JAPEX (Al Gharraf)	-	-
GAZ PROM (Badra)	2,607,334	2,722,089
CNOOC (Missan)	1,202,525 (c)	79,900 (d)
KOGAS (Akkas)	-	-
TPAO (Al Mansureya)	-	-
Kuwait Energy (Al Seebah)	42,927	181,486
Pakistan Petroleum Ltd (Exploration #8)	NA	NA
Bashneft (Exploration # 12)	-	-

Source: Respective entities

* *These numbers represent total training expenditures (recoverable and non-recoverable)*

(a) The training support expenditures represent 585,934 training hours allocated on 948 sessions on various subjects such as Core Skills, Safety, Finance, HR, IT and English language.

(b) The social expenditures represent sports & Recreation, Community base line study, Environmental improvements and community workshops in Qarmat Ali area.

(c) The training support expenditures represent 60,126 training hours allocated on 64 sessions on various subjects such as Health, Safety and Environment, English language and Computer Skills.

(d) The social expenditures represent caravan houses for refugee camp.

(e) The training support expenditures represent 448 training hours allocated on 4 sessions on various subjects such as Financial Auditing course, Structural Design and Evaluation Roads, Water Treatment & Injection and HR Workshop.

(f) The social expenditures represent Primary Health Care Centre Support, Foundation Mobile Clinic Programme, Road Safety Campaign, Children's Reflective Traffic vests and Occupational Health Training Course in Al Nashwa and Basra Wide.

Reconciliation of Reported Data

3

3. Reconciliation of Reported Data

3.1 Extracted for export crude oil quantities (in barrels) reconciliation between Ministry of Oil, North Oil Company and SOMO

It is noted that the extracted for export quantities related to North Oil Company had been fluctuating throughout the year 2014, where such fluctuation was mainly resulted from sabotages occurred on pipelines.

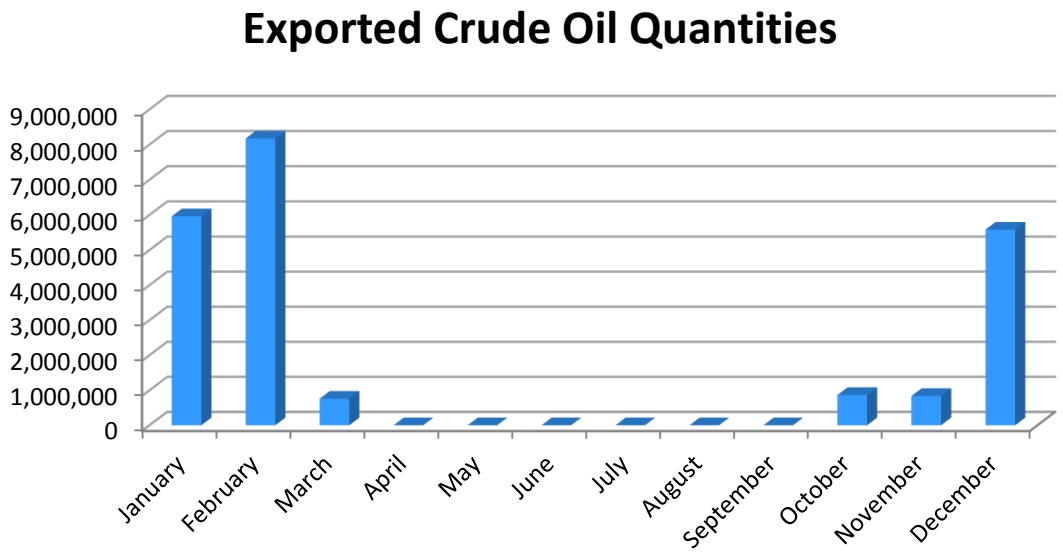
Month	MoO (a)	NOC (b)	SOMO (c)	Variance *
January	5,958,654	3,661,889	5,958,654	2,296,765
February	8,172,052	5,465,904	8,172,052	2,706,148
March	757,507	572,254	757,507	185,253
April	-	-	-	-
May	-	-	-	-
June	-	-	-	-
July	-	-	-	-
August	-	-	-	-
September	-	-	-	-
October	863,232	863,232	863,232	-
November	835,139	835,339	835,139	(200)
December	5,579,734	5,579,734	5,579,734	-
Total	**22,166,518**	**16,978,352**	**22,166,518**	**5,188,166**

(a): Extracted for export crude oil quantities reported by MoO

(b): Extracted for export crude oil quantities reported by NOC

(c): Extracted for export crude oil quantities reported by SOMO

* No differences were noted between the quantities reported by the MoO and SOMO. Differences were noted between the quantities reported by MoO and SOMO from one part and the quantities reported by NOC. North Oil Company reported only its extracted quantities while the MoO and SOMO reported, in addition to the quantities extracted by NOC, the quantities of crude oil received by NOC from KRG quantified at 38,042 barrels for purposes of exporting it through NOC.



3. Reconciliation of Reported Data (cont'd)

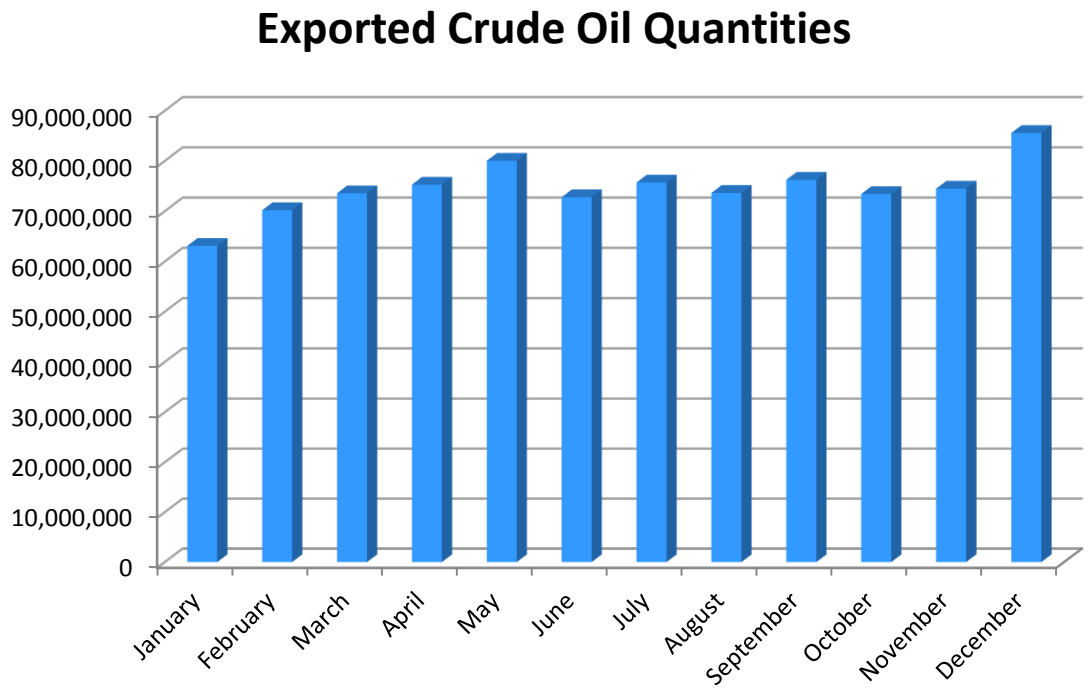
3.2 Extracted for export crude oil quantities (in barrels) reconciliation between Ministry of Oil, South Oil Company and SOMO

Month	MoO (a)	SOC (b)	SOMO (c)	Variance
January	63,100,296	63,100,296	63,100,296	-
February	70,190,413	70,190,413	70,190,413	-
March	73,558,259	75,141,259	73,558,259	-
April	75,279,286	73,696,544	75,279,286	-
May	80,036,038	80,035,780	80,036,038	-
June	72,786,208	72,786,208	72,786,208	-
July	75,710,465	75,710,465	75,710,465	-
August	73,638,008	73,638,608	73,638,008	-
September	76,249,781	76,249,781	76,249,781	-
October	73,418,895	75,986,895	73,418,895	-
November	74,473,882	73,905,882	74,473,882	-
December	85,561,998	85,561,998	85,561,998	-
Total	**896,004,129**	**896,004,129**	**896,004,129**	**-**

(a): Extracted for export crude oil quantities reported by MoO

(b): Extracted for export crude oil quantities reported by SOC

(c): Extracted for export crude oil quantities reported by SOMO



3. Reconciliation of Reported Data (cont'd)

3.3 Extracted for export crude oil quantities (in barrels) reconciliation between Ministry of Oil, Missan Oil Company and SOMO

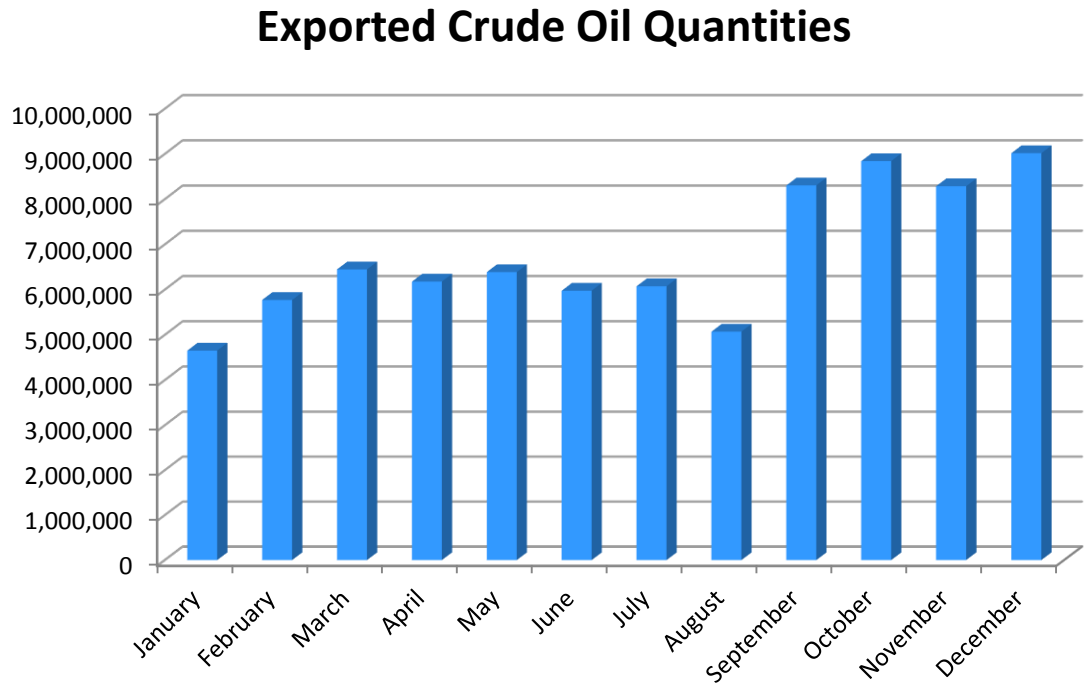
Month	MoO (a)	MOC (b)	SOMO (c) *	Variance
January	4,650,784	4,650,784		-
February	5,770,440	5,770,440		-
March	6,446,370	6,446,370		-
April	6,176,591	6,176,591		-
May	6,386,351	6,386,351		-
June	5,974,970	5,974,970		-
July	6,073,440	6,073,440		-
August	507,0178	507,0178		-
September	8,303,447	8,303,447		-
October	8,840,544	8,840,544		-
November	8,286,618	8,286,618		-
December	9,016,628	9,016,628		-
Total	**80,996,361**	**80,996,361**		**-**

(a): Extracted for export crude oil quantities reported by MoO

(b): Extracted for export crude oil quantities reported by MOC

(c): Extracted for export crude oil quantities reported by SOMO

* Export sales as per SOMO are directly related to NOC and SOC



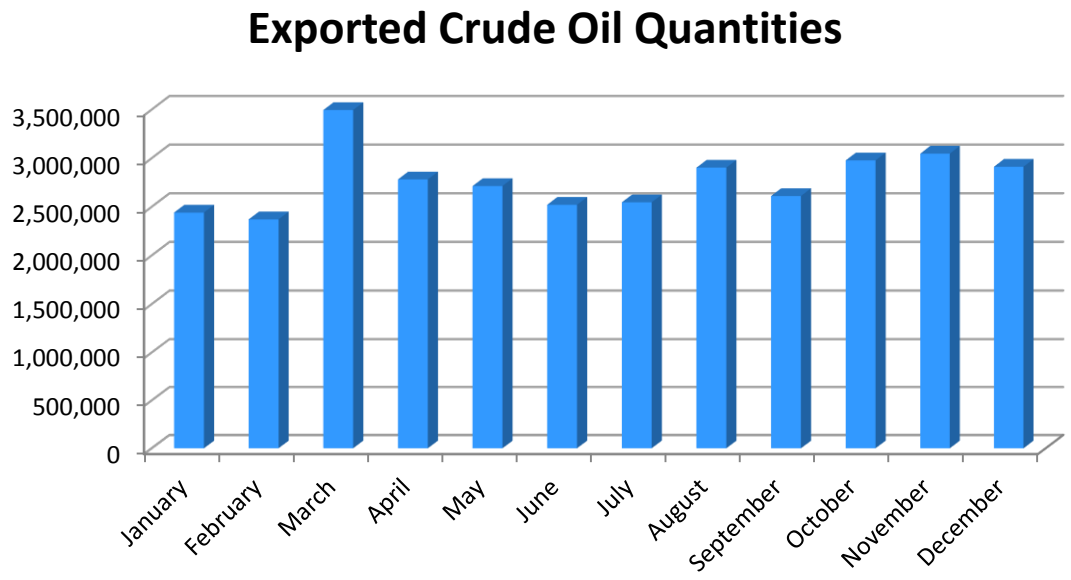
3. Reconciliation of Reported Data (cont'd)

3.4 Extracted for export crude oil quantities (in barrels), reconciliation between Ministry of Oil, Midland Oil Company and SOMO

Month	MoO (a) (Barrel)	MdOC (b) (Barrel)	SOMO (c) (Barrel) *	Variance
January	2,440,713	2,440,713		-
February	2,371,161	2,371,161		-
March	3,495,024	3,495,024		-
April	2,781,726	2,781,726		-
May	2,713,186	2,713,186		-
June	2,520,935	2,520,935		-
July	2,546,307	2,546,307		-
August	2,902,839	2,902,839		-
September	2,610,859	2,610,859		-
October	2,977,059	2,977,059		-
November	3,046,879	3,046,879		-
December	2,912,171	2,912,171		-
Total	33,318,859	33,318,859		-

(a): Extracted for export crude oil quantities reported by MoO
(b): Extracted for export crude oil quantities reported by MdOC
(c): Extracted for export crude oil quantities reported by SOMO
* Export sales as per SOMO are directly related to NOC and SOC

Source: data presented in the table was reported by the respective entities (MoO, SOMO and MdOC)



3. Reconciliation of Reported Data (cont'd)

3.5 Exported Crude Oil reconciliation by shipments, invoices and payments, between SOMO and buyers for the year 2014

	Company Name	SOMO USD	Buyer USD	Variance USD	Note
1	ApiOil Limited	564,911,957.48	565,142,579.42	(230,621.94)	A
2	Bharat Oman Refineries Limited	504,755,866.46	464,851,218.88	39,904,647.58	B
3	Bharat Petroleum Corporation LTD.	117,240,892.64	117,490,094	(249,201.36)	C
4	BP OIL INTERNATIONAL LIMITED	2,421,083,265.93	2,696,673,496.31	(275,590,230.38)	D
5	CEPSA TRADING SAU	797,757,130.11	693,914,811.73	103,842,318.38	E
6	Chevron Products Co. A Division Of Chevron U.S.A. Inc.	3,047,713,841.91	3,049,469,941.50	(1,756,099.59)	F
7	China National United Oil Corporation	1,938,772,779.98	1,857,130,976.87	81,641,803.11	G
8	China Offshore Oil (Singapore) International Pte Ltd	1,947,987,973.34	1,949,738,044.89	(1,750,071.55)	H
9	China ZhenHua Oil Co.Ltd.- Main/ (North Petroleum)	2,202,474,555.93	2,204,186,316.91	(1,711,760.98)	I
10	ENI Trading & Shipping SPA	388,078,989.42	388,192,379.26	(113,389.84)	J
11	ERG Supply &Trading S.P.A	941,961,841.41	-	941,961,841.41	K
12	Exxonmobil Sales and Supply LLC. U.S.A	1,771,069,203.06	2,164,859,539.36	(393,790,336.30)	L
13	GS Caltex Corporation	3,952,745,349.77	3,954,794,971.26	(2,049,621.49)	M
14	GUNVOR SA	346,635,301.78	346,835,515.74	(200,213.96)	N
15	Hindustan Petroleum Corporation Ltd. – India	1,973,060,180.06	2,122,841,959.52	(149,781,779.46)	O
16	HPCL-Mittal Energy Limited	237,610,024.84	237,610,024.84	-	
17	Indian Oil Corporation Limited – India	9,358,029,202.16	9,361,531,170.23	(3,501,968.07)	P
18	IPLOM INTERNATIONAL SA	341,025,718.35	341,387,137.50	(361,419.15)	Q
19	JX Nippon Oil & Energy Corporation	1,245,628,171.64	1,248,517,188.78	(2,889,017.14)	R
20	Koch Supply & Trading, LP	186,936,049.78	187,153,029.32	(216,979.54)	S
21	LITASCO MIDDLE EAST DMCC	715,248,533.22	576,023,983.53	139,224,549.69	T
22	MOTOR OIL HELLAS CORINTH REFINERIES S.A	1,513,907,579.09	1,631,027,055.05	(117,119,475.96)	U
23	Pertamina Energy Services Pte Ltd	1,020,031,351.72	910,948,149.90	109,083,201.82	AI
24	PETCO Trading Labuan Company Limited (PTLCL) / Petronas	999,982,789.62	999,982,789.62	-	
25	Petro Diamond Company limited / Care of Mitsubishi Corporation	1,028,662,218.80	1,028,662,218.80	-	
26	Petrobras Global Trading B.V.	847,770,697.74	933,529,599.53	(85,758,901.79)	V
27	PETROGAL S.A.	173,657,142.69	173,828,379.71	(171,237.02)	W
28	Phillips 66 International Trading Pte. Ltd.	3,031,496,512.52	2,996,410,137.25	35,086,375.27	X
29	REPSOL TRADING, S.A.	1,112,467,260.69	1,113,685,099.00	(1,217,838.31)	Y
30	SARAS S.P.A.	820,125,664.20	924,537,036.06	(104,411,371.86)	Z
31	SHELL INTERNATIONAL EASTERN TRADING COMPANY	1,135,313,316.81	1,108,918,792.83	26,394,523.98	AA

3. Reconciliation of Reported Data (cont'd)

3.5 Exported Crude Oil reconciliation by shipments, invoices and payments, between SOMO and buyers for the year 2014

	Company Name	SOMO	Buyer	Variance	Note
32	Sinochem International Oil (London) Co. LTD	4,535,719,883.95	4,565,244,904.59	(29,525,020.64)	AB
33	SK Energy Co., Ltd.	903,479,711.00	904,510,531.44	(1,030,820.44)	AC
34	SOCAR TRADING SA	203,629,777.22	203,629,777.22	-	
35	TOTSA TOTAL OIL TRADING SA	3,498,024,612.73	3,291,769,792.11	206,254,820.62	AD
36	Toyota Tsusho Corporation	1,718,974,870.00	1,719,830,512.03	(855,642.03)	AE
37	TURKISH PETROLEUM REFINERIES CORP.(TUPRAS)	527,563,568.21	527,563,568.22	-	
38	Unipec Asia Co. Ltd. / China International –Main	10,339,710,471.19	10,098,710,176.09	241,000,295.10	AF
39	Valero Marketing & Supply Co.	2,144,055,675.28	2,246,684,729.02	(102,629,053.74)	AG
40	VITOL REFINING SA	378,724,885.65	379,177,473.62	(452,587.97)	AH
	Total	**70,934,024,818.38**	**70,286,995,101.94**	**647,029,716.44**	

Several discrepancies were identified based on the reconciliation work performed. The discrepancies have been explained without undue difficulty. The reporting entities have been very responsive and cooperative in contributing to the reconciliation except for ERG as explained in the notes below.

3.6 Discrepancies

Discrepancies noticed during the reconciliation process resulted from the following:

1) Unreported demurrages and price/quantity differences
2) Shipments Cut off dates at beginning/year end (one side records the shipment in the year when it was loaded, while the other side records the shipment according to its due date)

3. Reconciliation of Reported Data (cont'd)

Reference (From Section 3.4)	Description of Difference	Amounts reported by SOMO and not reported by the Buyer	Amounts reported by the Buyer and not reported by SOMO	Variance
		USD	USD	USD
A	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 230,621.	(230,621)		**(230,621)**
B	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 49,007 in addition to shipments reported by SOMO in year 2013 amounted to USD 35,295,908. and shipment reported by the buyer in 2015 amounted to USD 31,247,250.	75,200,555	(35,295,908)	**39,904,647**
C	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 249,201.	(249,201)		**(249,201)**
D	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 4,549,849 in addition to shipments that were reported by the buyer in year 2013 amounted to USD 271,040,381.	(4,549,849)	(271,040,381)	**(275,590,230)**
E	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 113,800 in addition to shipments reported by SOMO in year 2013 amounted to USD 58,954,247.	58,840,446	45,001,871	**103,842,318**
F	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 1,756,099.	(1,756,099)		**(1,756,099)**
G	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 799,258 in addition to shipments reported by SOMO in year 2013 amounted to USD 31,811,199. and shipment reported by the buyer in 2015 amounted to USD 114,252,260.	(32,610,457)	114,252,260	**81,641,803**
H	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 1,750,071	(1,750,071)		**(1,750,071)**
I	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 1,711,760	(1,711,760)		**(1,711,760)**
J	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 113,389.	(113,389)		**(113,389)**
K	Data was not provided by the buyer due to the sale of the company. Hence, reconciliation could not be performed.	941,961,841		**941,961,841**
L	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 1,184,673. In addition to shipments reported by SOMO in FY15 amounted to USD 35,274,733 and unreported shipments by SOMO amounted to USD 357,330,929.	(1,184,673)	(392,605,662)	**(393,790,336)**
M	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 2,049,621.	(2,049,621)		**(2,049,621)**

3. Reconciliation of Reported Data (cont'd)

Reference (From Section 3.4)	Description of Difference	Amounts reported by SOMO and not reported by the Buyer	Amounts reported by the Buyer and not reported by SOMO	Variance
		USD	USD	USD
N	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 200,213.	(200,213)		**(200,213)**
O	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 38,349 in addition to shipments that were reported by SOMO in year 2013 amounted to USD 149,743,430.	(38,349)	(149,743,430)	**(149,781,779)**
P	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 3,501,968.	(3,501,968)		**(3,501,968)**
Q	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 361,419.	(361,419)		**(361,419)**
R	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 2,889,017.	(2,889,017)		**(2,889,017)**
S	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 216,979.	(216,979)		**(216,979)**
T	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 402,119 in addition to shipments that were reported by the buyer in year 2015 amounted USD 139,626,668.	(402,119)	139,626,668	**139,224,549**
U	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 39,241 in addition to shipments that were reported by the buyer in year 2015 amounted USD 45,532,472. And two shipments related to year 2013 that were reported in year 2014 amounted to USD 162,612,706	(39,241)	(117,080,234)	**(117,119,475)**
V	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 764,004 in addition to shipments that were reported by the buyer in year 2015 amounted USD 84,994,897.	(764,004)	(84,994,897)	**(85,758,901)**
W	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 171,237.	(171,237)		**(171,237)**
X	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 5,151,270 in addition to shipments that were reported by the buyer in year 2015 amounted to USD 40,237,646.	(5,151,270)	40,237,646	**35,086,375**
Y	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 1,217,838.	(1,217,838)		**(1,217,838)**
Z	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 865,991 in addition to shipment that were reported by SOMO in year 2013 amounted to USD 103,545,380.	(104,411,371)		**(104,411,371)**

3. Reconciliation of Reported Data (cont'd)

Reference (From Section 3.4)	Description of Difference	Amounts reported by SOMO and not reported by the Buyer	Amounts reported by the Buyer and not reported by SOMO	Variance
		USD	USD	USD
AA	The difference represents shipments that were reported by SOMO in year 2013 amounted to USD 33,554,876 in addition to shipments that were reported by the buyer in year 2015 amounted to USD 59,949,400.	(33,554,876)	59,949,400	**26,394,523**
AB	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 2,465,603 in addition to shipment that were reported by SOMO in year 2015 amounted to USD 27,059,417.	(29,525,020)		**(29,525,020)**
AC	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 1,030,820.	(1,030,820)		**(1,030,820)**
AD	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 4,380,481 in addition to shipments that were reported by the buyer in year 2013 amounted to USD 210,635,301.	(4,380,481)	210,635,301	**206,254,820**
AE	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 855,642.	(855,642)		**(855,642)**
AF	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 7,142,167 in addition to differences in quantity and prices reported by SOMO of USD 549,752 and shipments reported by the buyer in year 2015 amounted to USD 354,931,966, and shipments that are related to year 2015 were reported by the buyer in year 2014 amounted to USD 107,339,257.	(6,592,415)	247,592,709	**241,000,295**
AG	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 2,114,213 in addition to shipments that were reported by the buyer in year 2015 amounted to USD 73,704,342 and shipments related to year 2013 and were reported in 2014 amounted to USD 174,219,182.	(2,114,213)	(100,514,840)	**(102,629,053)**
AH	The difference represents delay penalties (demurrage) reported by SOMO related to amounts received under service contracts amounting to USD 452,587.	(452,587)		**(452,587)**
AI	The difference represents shipments reported by the buyer in year 2015 amounted to USD 109,083,201.	109,083,201		**109,083,201**
	Total Variances			**647,029,717**

3. Reconciliation of Reported Data (cont'd)

3.7 Signature Bonuses payments reconciliation between PCLD and the IOCs in calendar year 2014

There were no signature bonuses payments made during 2014 related to previous licensing rounds.

3. Reconciliation of Reported Data (cont'd)

3.8 Internal Service payments * reconciliation between MoO and North Oil Company in calendar year 2014

Month	Internal Service Payment as per MoO USD**	Internal Service Payment as per NOC USD**	Variances
January	14,579,760	14,579,760	-
February	8,576,329	8,576,329	-
March	10,291,595	10,291,595	-
April	-	-	-
May	17,152,659	17,152,659	-
June	-	-	-
July	-	-	-
August	-	-	-
September	-	-	-
October	21,440,823	21,440,823	-
November	21,440,823	21,440,823	-
December	42,881,647	42,881,647	-
Total	**136,363,636**	**136,363,636**	-

* Internal service payments are payments received by National Oil Companies (NOCs) to cover the production cost of crude oil. These payments are made by the Ministry of Finance to SOMO which in turn makes the required transfers to the NOCs on a monthly basis.

** The figures presented in this table were provided in IQD and converted to US$ using 1US$ = 1,166 IQD as an exchange rate.

3.9 Internal Service payments reconciliation between MoO and Missan Oil Company in calendar year 2014

Month	Internal Service Payment as per MoO USD*	Internal Service Payment as per MOC USD*	Variances
January	38,593,482	38,593,482	-
February	16,252,287	16,252,287	-
March	13,722,127	13,722,127	-
April	-	-	-
May	15,437,393	15,437,393	-
June	17,152,659	17,152,659	-
July	-	-	-
August	-	-	-
September	13,722,127	13,722,127	-
October	17,152,659	17,152,659	-
November	-	-	-
December	17,152,659	17,152,659	-
Total	**149,185,391**	**149,185,391**	-

* The figures presented in this table were provided in IQD and converted to US$ using 1US$ = 1,166 IQD as an exchange rate.

3. Reconciliation of Reported Data (cont'd)

3.10 Internal Service payments reconciliation between MoO and South Oil Company in calendar year 2014

Month	Internal Service Payment as per MoO USD*	Internal Service Payment as per SOC USD*	Variances
January	-	-	-
February	128,644,940	128,644,940	-
March	-	-	-
April	-	-	-
May	-	-	-
June	102,915,952	102,915,952	-
July	-	-	-
August	128,644,940	128,644,940	-
September	85,763,293	85,763,293	-
October	-	-	-
November	-	-	-
December	-	-	-
Total	445,969,125	445,969,125	-

* The figures presented in this table were provided in IQD and converted to US$ using 1US$ = 1,166 IQD as an exchange rate.

3.11 Internal service payments reconciliation between Ministry of Oil and Midland Oil Company in calendar year 2014

Month	Amounts/MoO USD*	Amounts/MdOC USD*	Variances USD
January	-	-	-
February	6,861,063	6,861,063	-
March	-	-	-
April	6,003,431	6,003,431	-
May	-	-	-
June	-	-	-
July	-	-	-
August	-	-	-
September	-	-	-
October	-	-	-
November	-	-	-
December	57,461,407	57,461,407	-
Total	70,325,901	70,325,901	-

* The figures presented in this table were provided in IQD and converted to US$ using 1US$ = 1,166 IQD as an exchange rate.

3. Reconciliation of Reported Data (cont'd)

3.12.1 Reconciliation of crude oil quantities supplied to the refineries. Reconciliation performed between South Oil Company, Ministry of Oil and South Refineries for year 2014.

Crude Oil (Barrel)			
Quantities/SR	Quantities/SOC	Quantities/MoO	Variance
119,853,249	119,853,249	119,853,249	-

Source: data presented in the table was reported by the respective entities (SR, SOC and MoO)

3.12.2 Reconciliation of crude oil quantities supplied to the refineries. Reconciliation performed between South Oil Company, Ministry of Oil and Midland Refineries for year 2014.

Crude Oil (Barrel)			
Quantities/MdR	Quantities/SOC	Quantities/MoO	Variance
7,917,448	7,917,448	7,917,448	-

Source: data presented in the table was reported by the respective entities (MdR, SOC and MoO)

3.12.3 Reconciliation of crude oil quantities supplied to the refineries between Missan Oil Company, Ministry of Oil and South Refineries for year 2014.

Crude Oil (Barrel)			
Quantities/SR	Quantities/MOC	Quantities/MoO	Variance
7,918,881	7,918,881	7,918,881	-

Source: data presented in the table was reported by the respective entities (SR, MOC and MoO)

3.12.4 Reconciliation of crude oil quantities supplied to the refineries. Reconciliation performed between Midland Oil Company, Ministry of Oil and Midland Refineries for year 2014.

Crude Oil (Barrel)			
Quantities/MdR	Quantities/MdOC	Quantities/MoO	Variance
858,829	858,829	858,829	-

Source: data presented in the table was reported by the respective entities (MdR, MdOC and MoO)

3. Reconciliation of Reported Data (cont'd)

3.12.5 Reconciliation of crude oil quantities supplied to the refineries. Reconciliation performed between North Oil Company, Ministry of Oil and North Refineries for year 2014.

Crude Oil (Barrel)			
Quantities/NR	Quantities/NOC	Quantities/MoO	Variance **
*	50,972,723	51,311,272	(338,549)

North Refinery was not able to provide requested data due to security unrest where the data is located.

***The difference between NOC and MoO data is resulted from the fact that MoO data comprises all quantities supplied from NOC to all Refineries, not to North Refineries in particular.*

Source: data presented in the table was reported by the respective entities (NR, NOC and MoO)

3. Reconciliation of Reported Data (cont'd)

3.13 Reconciliation of cost recovery* between Ministry of Oil and International Oil Companies for year 2014.

Company Name	Oil Field	Cost Recovery /MoO USD	Cost Recovery / Providers USD	Variance	Notes
BP Petro China	**Rumaila**	2,692,901,953	2,574,797,483	118,104,470	**A**

Company Name	Oil Field	Cost Recovery /MoO USD	Cost Recovery / Providers USD	Variance USD	Notes
ExxonMobil Shell	**West Qurna (Phase1)**	729,647,569	502,608,495	227,039,074	**A**

Company Name	Oil Field	Cost Recovery /MoO USD	Cost Recovery / Providers USD	Variance USD	Notes
ENI Occidental KOGAS	**Zubair**	1,462,984,342	630,830,488	832,153,854	**A**

Company Name	Oil Field	Cost Recovery /MoO USD	Cost Recovery / Providers USD	Variance USD	Notes
Shell IPD B.V Petronas	**Majnoun**	2,845,427,789	2,422,667,084	422,760,705	**A**

Company Name	Oil Field	Cost Recovery /MoO USD	Cost Recovery / Providers USD	Variance USD	Notes
AL WAHA PETROLEUM CO.LTD.	**Ahadab**	1,027,526,145	1,027,526,145	-	

Company Name	Oil Field	Cost Recovery /MoO USD	Cost Recovery / Providers USD	Variance USD	Notes
CNOOC TPAO	**Missan**	855,659,101	855,659,101	-	

3. Reconciliation of Reported Data (cont'd)

3.13 Reconciliation of cost recovery* between Ministry of Oil and International Oil Companies for year 2014.

Company Name	Oil Field	Cost Recovery /MoO USD	Cost Recovery / Providers USD	Variance USD	Notes
Petro China Total Petronas	**Halfaya**	1,479,059,970	1,291,408,877	187,651,093	**A**

Company Name	Oil Field	Cost Recovery /MoO USD	Cost Recovery / Providers USD	Variance	Notes
Lukoil	**West Qurna (Phase 2)**	3,776,331,087	-	3,776,331,087	**A**

Company Name	Oil Field	Cost Recovery /MoO USD	Cost Recovery / Providers USD	Variance USD	Notes
Petronas Japex	**Al Gharraf**	1,361,352,498	1,171,071,790	190,280,708	**A**

Company Name	Oil Field	Cost Recovery /MoO USD	Cost Recovery / Providers USD	Variance USD	Notes
Gazprom & Korea Petronas & TPAO	**Badrah**	111,361,560	-	111,361,560	**B**

Total	16,342,252,014	10,476,569,463	5,865,682,551

* *For more information on the definition and calculation method of cost recovery, refer to section 2.6.*

A) These variances were not justified by both parties (the Ministry of Oil and the International Oil Companies).

B) The variance represents the cost recovery for the third and fourth quarters of year 2014 and was approved on 8 January 2015. The contractor did not receive these amounts in year 2014 due to the fact that commercial production realization announcement was on 23 November 2014.

3. Reconciliation of Reported Data (cont'd)

3.14 Reconciliation of remuneration fees* between Ministry of Oil and International Oil Companies for year 2014

Company Name	Field	Remuneration Fees/MoO USD	Remuneration Fees/Providers USD	Variance	Notes **
BP Petro China	**Rumaila**	386,266,748	-	386,266,748	**A**
ExxonMobil Shell	**West Qurna (Phase1)**	96,575,611	56,493,370	40,082,241	**B**
ENI Occidental KOGAS	**Zubair**	120,834,315	47,253,111	73,581,204	**C**
AL WAHA PETROLEUM CO.LTD.	**Ahadab**	238,905,444	238,905,444	-	
Petro China Total Petronas	**Halfaya**	59,077,012	20,614,954	38,462,058	**D**
CNOOC TPAO	**Missan**	23,177,306	23,177,306	-	
Shell Petronas	**Majnoun**	99,617,972	-	99,617,972	**E**
Japex Petronas	**Al Gharraf**	49,906,424	-	49,906,424	**F**
Total		**1,074,360,832**	**386,444,185**	**687,916,647**	

* *For more information on the definition and calculation method of remuneration fees, refer to section 2.6.*

** *These notes were provided by the Ministry of Oil.*

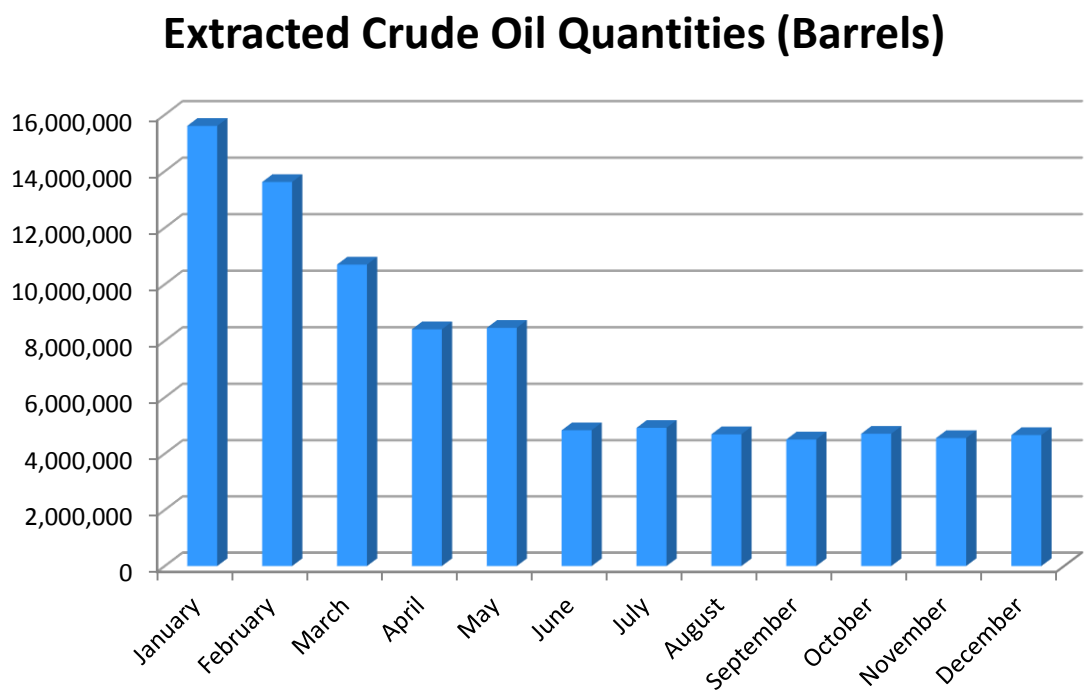
A) The variance is due to the fact that the contractor was not able to lift all quantities during FY 2014. The contractor does not report the remuneration unless all lifted quantities cover all cost dues.
B) The variance is due to the fact that the contractor was not able to lift all quantities during FY 2014.
C) The variance is due to the fact that the contractor was not able to lift all quantities during FY 2014.
D) The variance is due to the fact that the contractor was not able to lift all quantities during FY 2014.
E) The variance is due to the fact that the contractor was not able to lift all quantities during FY 2014.
F) The variance is due to the fact that the contractor was not able to lift all quantities during FY 2014.

3. Reconciliation of Reported Data (cont'd)

3.15 Reconciliation of extracted crude oil quantities between Ministry of Oil and North Oil Company

Month	NOC (Barrels)	MoO (Barrels)	Variances (Barrels)
January	15,604,241	15,604,241	-
February	13,617,696	13,617,696	-
March	10,697,648	10,697,648	-
April	8,406,896	8,406,896	-
May	8,459,571	8,459,571	-
June	4,833,080	4,833,080	-
July	4,920,084	4,920,084	-
August	4,690,142	4,690,142	-
September	4,506,381	4,506,381	-
October	4,707,926	4,707,926	-
November	4,555,326	4,555,326	-
December	4,662,311	4,662,311	-
Total	**89,661,302**	**89,661,302**	**-**

Source: data presented in the table was reported by the respective entities (NOC and MoO)

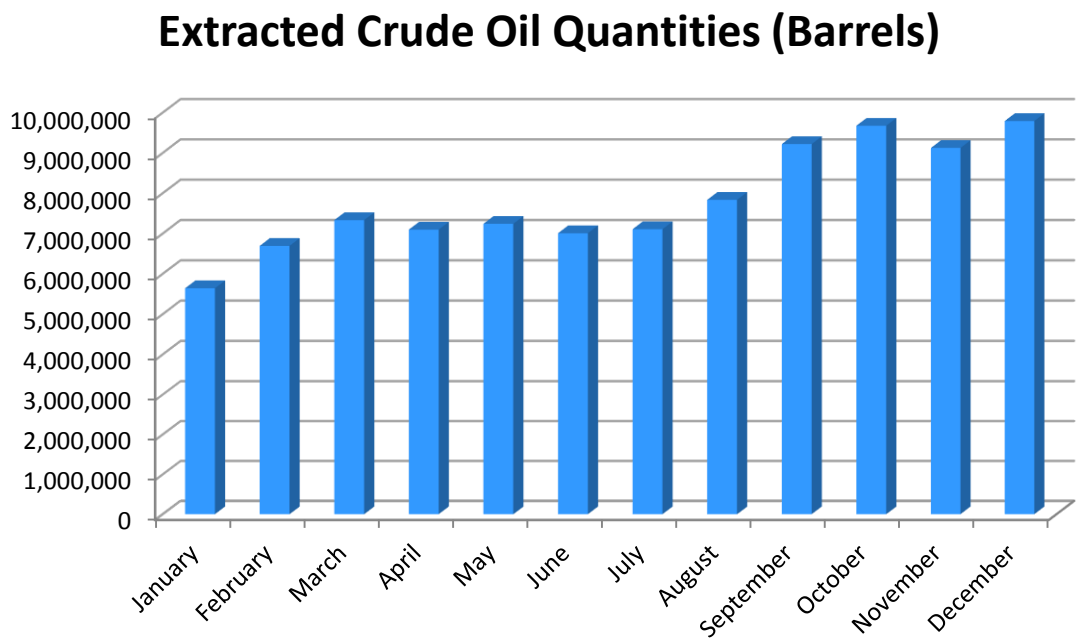


3. Reconciliation of Reported Data (cont'd)

3.16 Reconciliation of extracted crude oil quantities between Ministry of Oil and Missan Oil Company

Month	MOC (Barrels)	MoO (Barrels)	Variances (Barrels)
January	5,642,463	5,642,463	-
February	6,693,051	6,693,051	-
March	7,331,577	7,331,577	-
April	7,096,402	7,096,402	-
May	7,241,079	7,241,079	-
June	7,007,079	7,007,079	-
July	7,106,686	7,106,686	-
August	7,836,082	7,836,082	-
September	9,219,072	9,219,072	-
October	9,673,094	9,673,094	-
November	9,123,020	9,123,020	-
December	9,790,481	9,790,481	-
Total	**93,760,086**	**93,760,086**	**-**

Source: data presented in the table was reported by the respective entities (MOC and MoO)

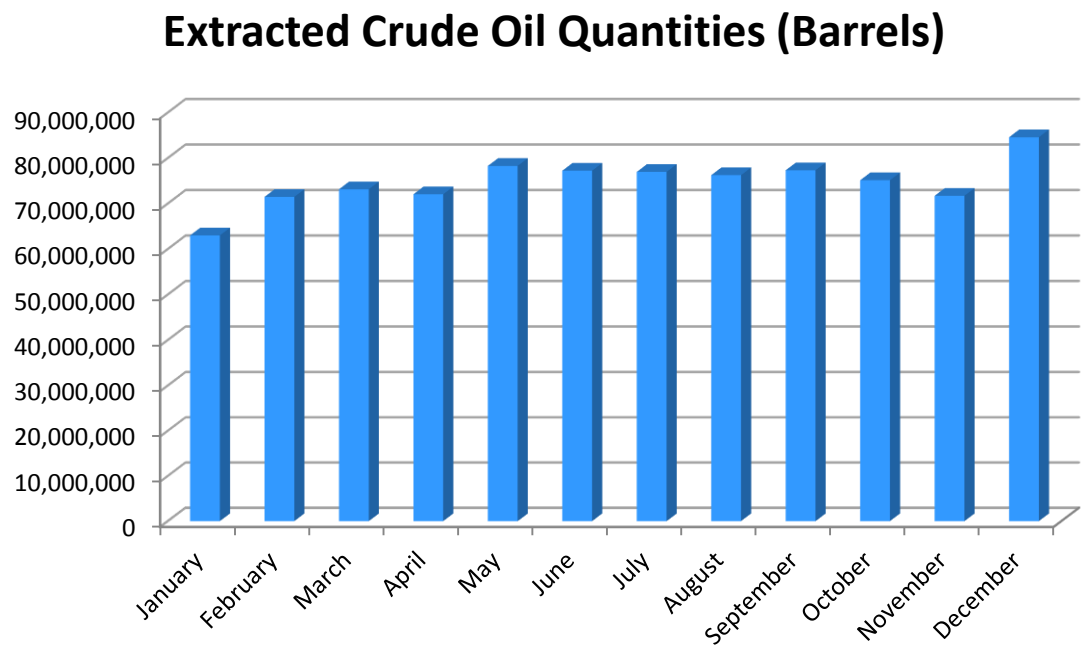


3. Reconciliation of Reported Data (cont'd)

3.17 Reconciliation of extracted crude oil quantities between Ministry of Oil and South Oil Company

Month	SOC (Barrels)	MoO (Barrels)	Variances (Barrels)
January	62,993,138	62,993,138	-
February	71,460,371	7,146,0371	-
March	73,133,493	73,133,493	-
April	72,040,907	72,040,907	-
May	78,274,523	78,274,523	-
June	77,222,055	77,222,055	-
July	76,967,730	76,967,730	-
August	76,249,361	76,249,361	-
September	77,314,351	77,314,351	-
October	75,130,857	75,130,857	-
November	71,695,770	71,695,770	-
December	84,570,579	84,570,579	-
Total	**897,053,135**	**897,053,135**	**-**

Source: data presented in the table was reported by the respective entities (SOC and MoO)



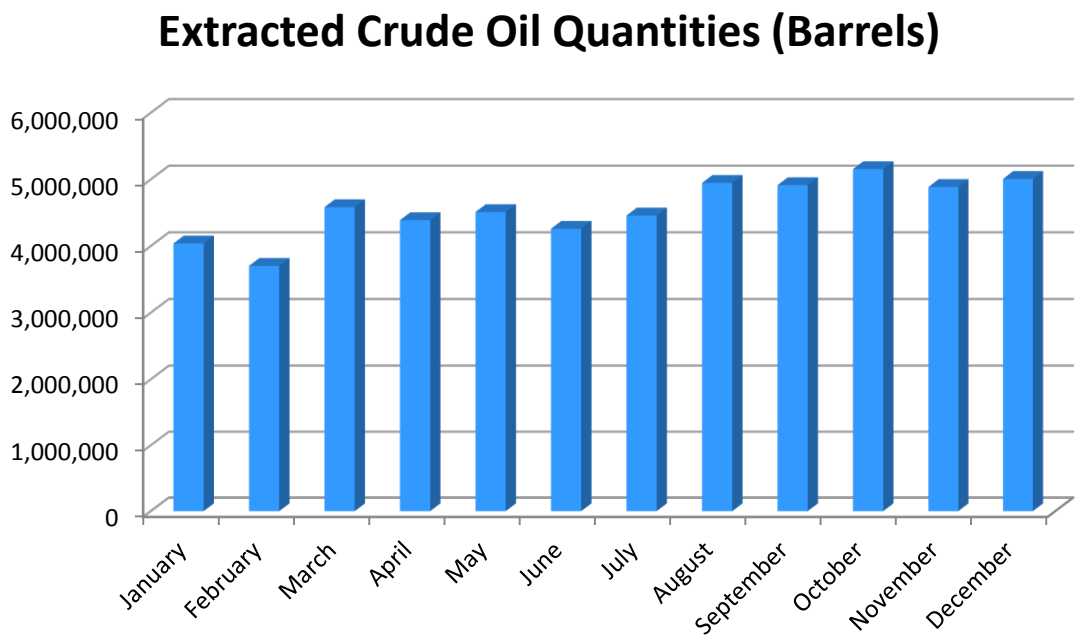
Source: the chart was prepared based on the data provided by the MoO

3. Reconciliation of Reported Data (cont'd)

3.18 Reconciliation of extracted crude oil quantities between Ministry of Oil and Midland Oil Company

Month	MdOC (Barrels)	MoO (Barrels)	Variances (Barrels)
January	4,038,500	4,038,500	-
February	3,702,028	3,702,028	-
March	4,583,431	4,583,431	-
April	4,387,984	4,387,984	-
May	4,509,921	4,509,921	-
June	4,259,095	4,259,095	-
July	4,458,033	4,458,033	-
August	4,947,327	4,947,327	-
September	4,913,952	4,913,952	-
October	5,153,820	5,153,820	-
November	4,885,965	4,885,965	-
December	5,007,207	5,007,207	-
Total	**54,847,263**	**54,847,263**	**-**

Source: data presented in the table was reported by the respective entities (MdOC and MoO)



Source: the chart was prepared based on the data provided by the MoO

3. Reconciliation of Reported Data (cont'd)

3.19 Corporate tax reconciliation between Ministry of Oil and International Oil Companies for year 2014

Differences in tax reconciliation is mainly attributed to the fact that corporate income tax for the year 2014 was deducted by the Ministry of Oil during year 2015, while deductions were recorded by most providers during the year 2014. This is illustrated in the table below. According to the existing tax law, payments would be made in the following year.

Furthermore, it is worth mentioning that although IOCs related taxes had been withheld by the MoO, yet it had not been transferred to the General Commission of Taxes.

Field	Company Name	Tax / MoO USD	Tax / IOC USD	Variance USD	Notes
Rumaila	BP PetroChaina	67,041,548	66,818,077	49,549,807	**A**
West Qurna (Phase1)	ExxonMobil Shell	41,200,041	41,200,041	-	
Zubair	ENI Occidental KOGAS	30,159,195	16,538,589	23,638,821	**A**
Halfaya	Petro China Total Petronas Petronas	11,701,622	10,970,270	4,959,557	**A**
Missan	CNOOC TPAO	6,084,043	6,084,043	-	
Al Ahdab	Al Waha				
Total		**156,186,449**	**141,611,020**	**14,575,429**	

Source: data presented in the table was reported by the respective entities (Ministry of Oil and International Oil Companies)

A) These variances were not justified by both parties (the Ministry of Oil and the International Oil Companies).

These companies are the only companies that have received their dues during year 2014.

3. Reconciliation of Reported Data (cont'd)

3.20 Reconciliation of crude oil quantities supplied to Electricity Generation Directorates (EGD). Reconciliation performed between Ministry of Electricity and Oil Pipeline Company (OPC) for year 2014.

Product type	Quantities/OPC	Quantities/EGD Basrah	Variance
Crude Oil (Barrel)	7,350,568	7,350,568	-

Product type	Quantities/OPC	Quantities/EGD Al Furat Middle	Variance
Crude Oil (Barrel)	20,384,835	20,384,835	-

Product type	Quantities/OPC	Quantities/EGD Middle Region	Variance
Crude Oil (Barrel)	11,766,474	11,766,474	-

Production type	Quantities/OPC	Quantities/EGD Nasiriyah	Variance
Crude Oil (Barrel)	1,364,298	1,364,298	-

Source: data presented in the table were reported by the respective entities (Oil Pipeline Company and Ministry of Electricity/EGD)

3. Reconciliation of Reported Data (cont'd)

3.21 Reconciliation of the net revenue from the sale of oil products to the local market. Reconciliation performed between Ministry of Finance and Oil Products Distribution Company for years 2013 and 2014*

It is noted in the below table that the revenue from the sale of oil products to local market had decreased in year 2014 comparing to year 2013, which was mainly due to the decrease in quantities produced during year 2014.

Year	Amount reported by Ministry of Finance for treasury share USD**	Amount reported by Oil Product Distribution Company USD**	Variances
2013	8,822,191,146	8,822,191,146	-
2014	6,965,331,006	6,965,331,006	-
Total	**15,787,522,153**	**15,787,522,153**	**-**

* *Figures in this table were provided by the respective entities on accrual basis.*

** *The figures presented in this table were provided in IQD and converted to US$ using 1US$ = 1,166 IQD as an exchange rate.*

3. Reconciliation of Reported Data (cont'd)

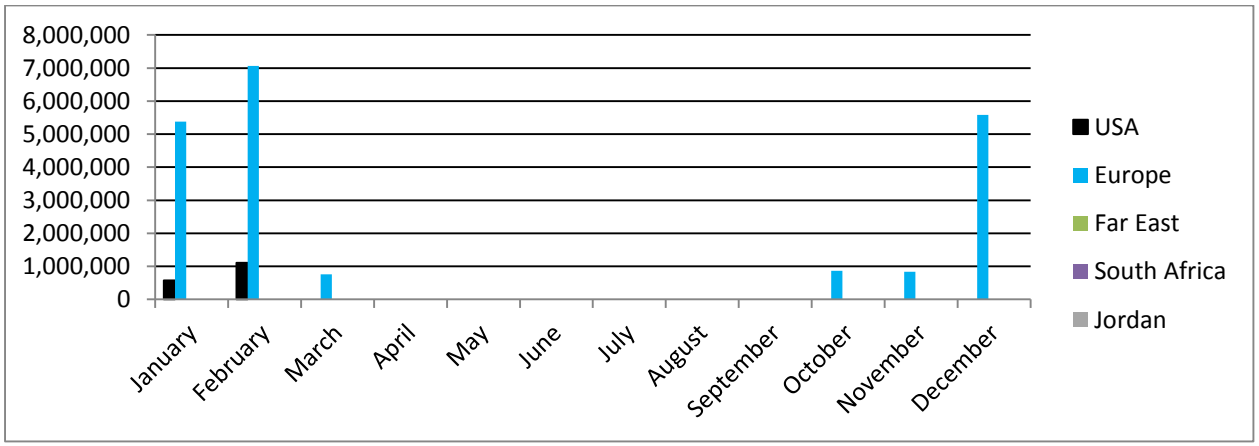
3.22Monthly export quantities and average price of exported crude oil for the year 2014 with regard to the American, European and Asian Markets, and the quantity exported through Ceyhan Port & Seniya Depot by SOMO

Crude oil export average barrel prices differ from a month to another since they are based on international crude oil barrel prices markets.

Month	Ceyhan Port and Seniya Depot (Barrel)					Monthly Average Price in (US$)				
	USA	Europe	Far East	South Africa	Jordan	USA	Europe	Far East	South Africa	Jordan
January	574,395	5,384,259	-	-	-	96	105	-	-	-
February	1,103,226	7,068,826	-	-	-	98	104	-	-	-
March	-	757,507	-	-	-	-	103	-	-	-
April	-	-	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-	-	-
June	-	-	-	-	-	-	-	-	-	-
July	-	-	-	-	-	-	-	-	-	-
August	-	-	-	-	-	-	-	-	-	-
September	-	-	-	-	-	-	-	-	-	-
October	-	863,232	-	-	-	-	81	-	-	-
November	-	835,339	-	-	-	-	65	-	-	-
December	-	5,579,734	-	-	-	-	56	-	-	-
Total	1,677,621	20,488,897	-	-	-					

Source: data presented in the table was reported by SOMO

Quantity exported through Ceyhan Port & Seniya Depot in barrels/month

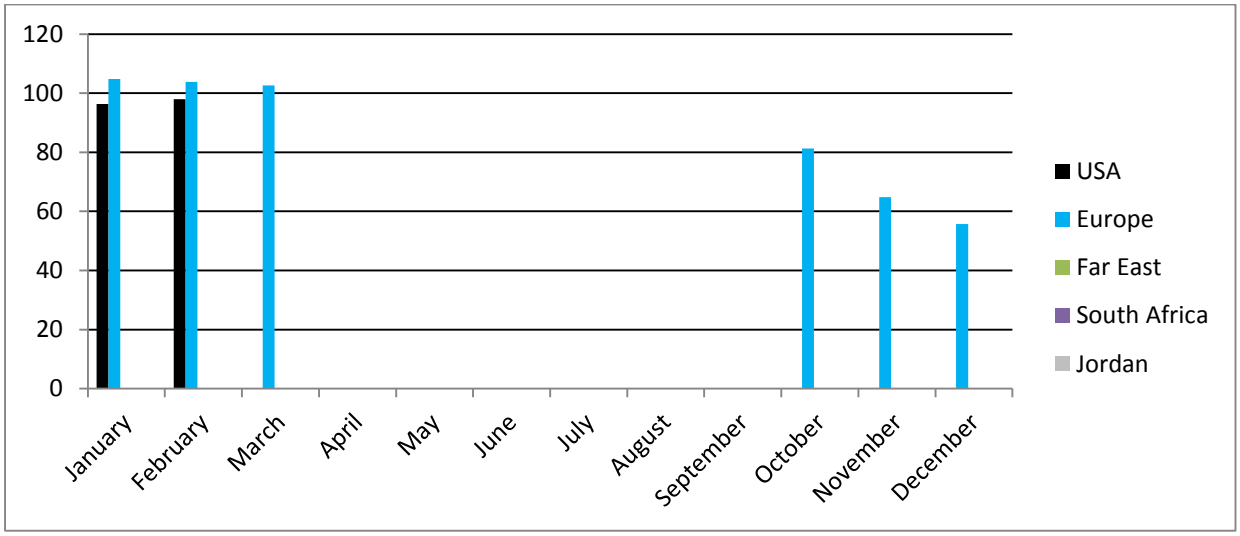


Source: the chart was prepared based on the data provided by SOMO

3. Reconciliation of Reported Data (cont'd)

3.23Monthly export quantities and average price of exported crude oil for the year 2014 with regard to the American, European and Asian Markets and the quantity exported through Ceyhan Port & Seniya Depot by SOMO

Monthly export price average (US$)



Source: data presented in the table was reported by the respective entity (SOMO)

3. Reconciliation of Reported Data (cont'd)

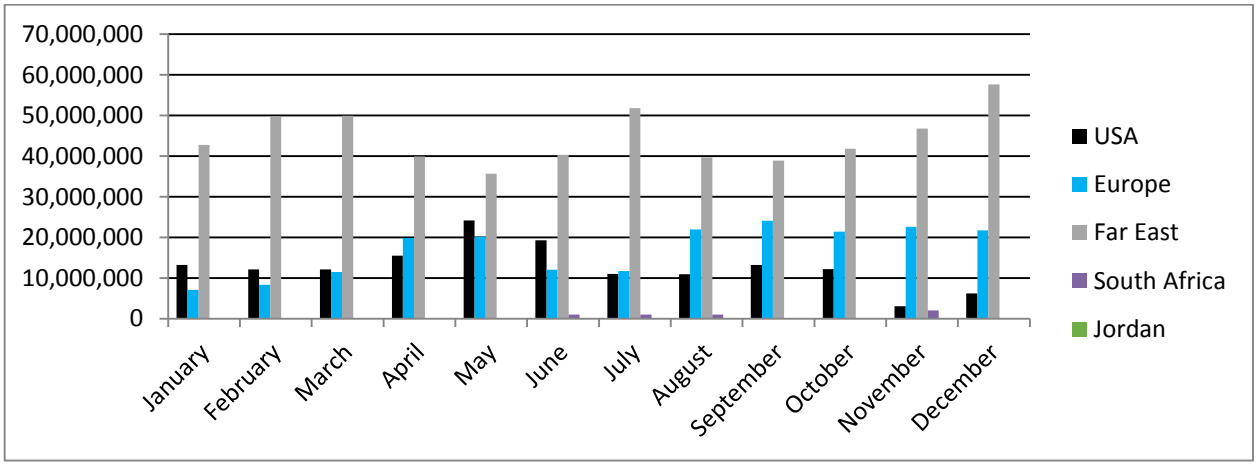
3.24Monthly export quantities and average price of exported crude oil for the year 2014 with regard to the American, European and Asian Markets and the quantity exported through Basrah and Khor Al-Amaya ports by SOMO

Crude oil export average barrel prices differ from a month to another since they are based on international crude oil barrel prices markets.

Month	Basrah Port and Khor Al-Amaya Port (Barrels)					Monthly Average Price in (US$)				
	USA	Europe	Far East	South Africa	Jordan	USA	Europe	Far East	South Africa	Jordan
January	13,241,541	7,082,743	42,781,198	-	-	95	101	105	-	-
February	12,131,009	8,310,681	49,748,723	-	-	97	101	103	-	-
March	12,148,855	11,490,544	49,918,860	-	-	98	99	102	-	-
April	15,505,934	19,815,999	39,957,353	-	-	96	102	102	-	-
May	24,206,269	20,184,794	35,644,975	-	-	96	104	103	-	-
June	19,329,940	12,066,101	40,346,346	1,043,821	-	99	102	105	106	-
July	11,034,734	11,764,160	51,871,255	1,040,316	-	101	96	104	99	-
August	10,949,332	21,957,434	39,688,537	1,043,305	-	97	93	100	94	-
September	13,219,136	24,127,784	38,902,861	-	-	91	85	94	-	-
October	12,203,545	21,411,246	41,804,104	-	-	82	76	83	-	-
November	3,051,759	22,618,479	46,764,250	2,039,394	-	73	65	72	64	-
December	6,216,510	21,708,340	57,637,148	-	-	63	45	61	-	-
Total	**153,238,564**	**202,538,305**	**535,065,610**	**5,166,836**	-					

Source: data presented in the table was reported by SOMO

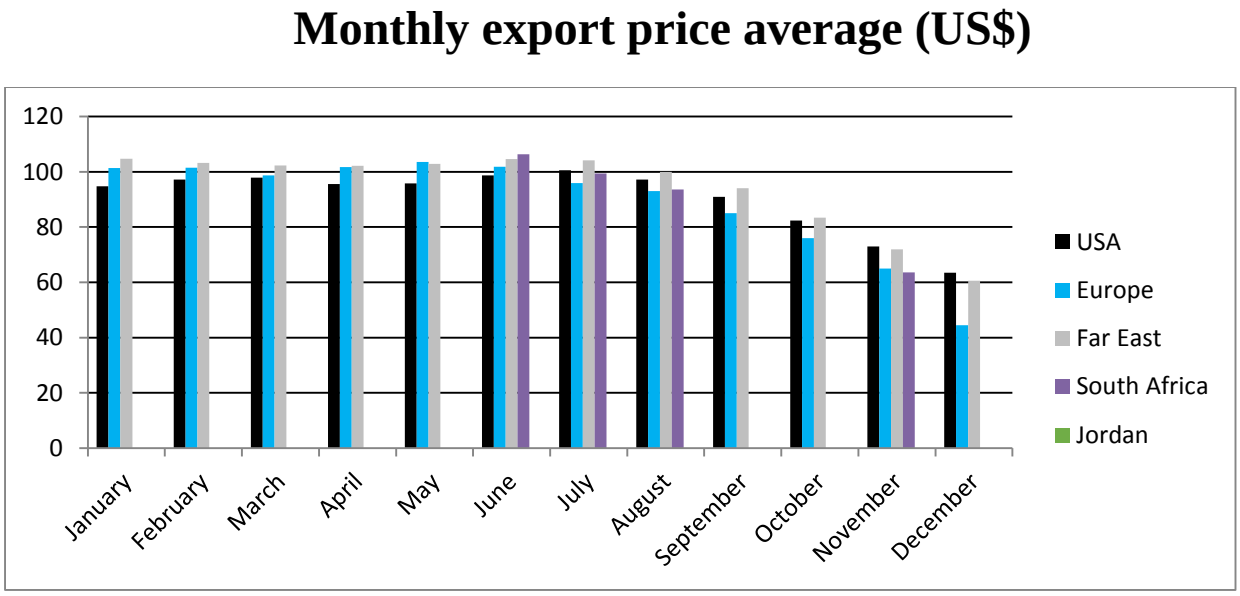
Quantity exported through Basrah & Khor Al-Amaya Ports in barrels/month



Source: the chart was prepared based on the data provided by SOMO

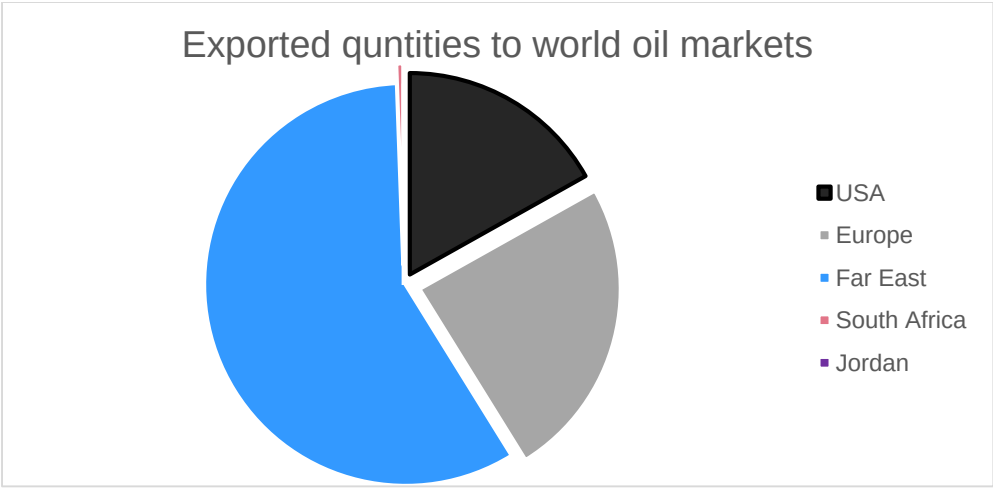
3. Reconciliation of Reported Data (cont'd)

3.25Monthly export quantities and average price for exported crude oil for the year 2014 with regard to the American, European and Asian Markets and the quantity exported through Basrah and Khor Al-Amaya ports by SOMO



Source: the chart was prepared based on the data provided by SOMO

3.26Quantities exported by North Oil Company, Missan Oil Company and South Oil Company to world oil markets



Source: the diagram was prepared based on the data provided by SOMO

3. Reconciliation of Reported Data (cont'd)

Third Party Inspectors

Third party verifiers' responsibility is to calibrate meters and to endorse oil quantities loaded onto vessels. In case of any discrepancy between the terminal meters and the vessels' meters, the third party verifiers measure the loaded oil quantity through the ullage method of measurement.

The table below includes details of the measurement meters installed at the southern oil terminals.

Location	Meter Type	Calibration Frequency	Number of Meters	Third Party Inspector
Basrah Oil Terminal	Daniel Turbine Meters (US/UK)	Subsequent to each loading process	24	Bureau Veritas / SGS
Al Amayah Oil Terminal	Daniel Turbine Meters (US/UK)	Subsequent to each loading process	12	

As for the northern oil terminal (Ceyhan Terminal), it is owned by the Turkish party, while the third party inspector during year 2014 was Bureau Veritas "Inspectorate".

3.27 Reconciliation of natural gas quantities supplied to gas companies. Reconciliation performed between North Oil Company, Ministry of Oil and North Gas Company for year 2014.

Natural Gas (m3)			
Quantities/NGC	Quantities/NOC	Quantities/MoO	Variance
2,816,554,900	2,816,554,900	2,816,554,900	-

Source: data presented in the table was reported by the respective entities (NGC, NOC and MoO)

3. Reconciliation of Reported Data (cont'd)

3.28 Reconciliation of natural gas quantities supplied to gas companies between South Oil Company, Ministry of Oil and South Gas Company for year 2014.

Natural Gas (m3)			
Quantities/SGC	Quantities/SOC	Quantities/MoO	Variance
3,941,073,198	3,941,073,198	3,941,073,198	-

Source: data presented in the table was reported by the respective entities (SGC, SOC and MoO)

3.29Reconciliation of natural gas quantities supplied to Electricity Generation Directorates (EGD). Reconciliation performed between Ministry of Electricity and Oil Pipeline Company (OPC) for year 2014.

Product type	Quantities/OPC	Quantities/EGD Basrah	Variance
Natural Gas (m3)	1,807,417,424	1,807,417,424	-

Product type	Quantities/OPC	Quantities/EGD Al Furat Middle	Variance
Natural Gas (m3)	579,615,432	579,615,432	-

Product type	Quantities/OPC	Quantities/EGD Middle Region	Variance
Natural Gas (m3)	689,621,433	689,621,433	-

3. Reconciliation of Reported Data (cont'd)

3.29 Reconciliation of natural gas quantities supplied to Electricity Generation Directorates (EGD). Reconciliation performed between Ministry of Electricity and Oil Pipeline Company (OPC) for year 2014.

Production type	Quantities/OPC	Quantities/EGD Salah AlDin	Variance
Natural Gas (m3)	555,000	555,000	-

Production type	Quantities/OPC	Quantities/EGD North Region	Variance
Natural Gas (m3)	1,674,774,634	1,674,774,634	-

Production type	Quantities/OPC	Quantities/EGD Nasiriyah	Variance
Natural Gas (m3)	69,960,691	69,960,691	-

Source: data presented in the table were reported by the respective entities (Oil Pipeline Company and Ministry of Electricity/EGD)

3.30 Reconciliation of natural gas quantities supplied to Ministry of Industry and Minerals' companies that consumed natural gas. Reconciliation performed between Ministry of Industry and Minerals and the ministry's companies for year 2014.

No.	Company Name	Natural Gas (Cubic Meters) Quantities/ MoO	Quantities/ MIM	Quantities/ companies	Variances
1	The State Company of Fertilizers South Region	231,588,000	231,588,000	231,588,000	-
2	State Co. for Fertilizers North Area	8,362,000	8,362,000	8,362,000	-
3	State Company for Petrochemical Ind.	29,168,000	29,168,000	29,168,000	-

Source: data presented in the table was reported by the respective entities (Ministry of Oil, Ministry of Industry and Minerals and the ministry's companies)

Further Transparency

4

4. Further Transparency

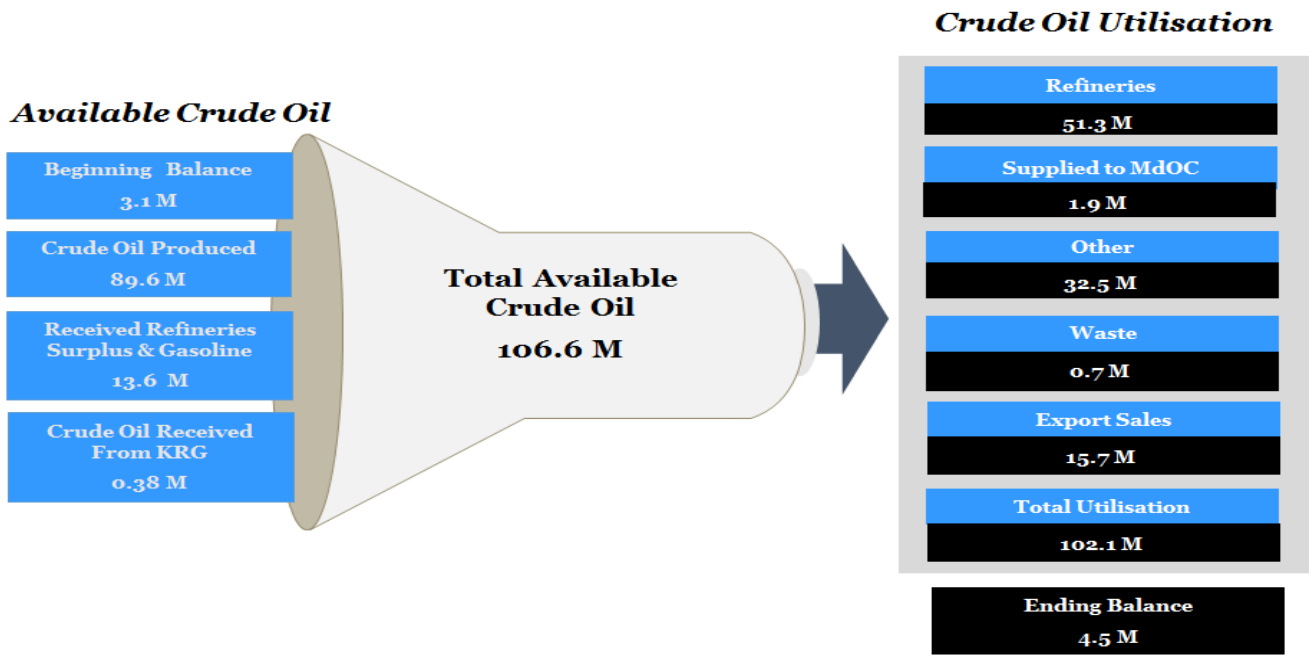
We had obtained from the Ministry of Oil – Technical Directorate – Matching Department Crude Oil flows for each of the National Upstream Companies, and one combined crude oil flow table for all National Upstream Companies.

The inclusion of such flow may enhance the understanding for the common readers of the Iraqi crude oil flow in major aspects.

4.1 North Oil Company Crude Oil Flow (in barrels - rounded)

Month / Reporting Items	Available Crude Oil (in addition to Refineries				Total Available Crude Oil (in addition to Refineries Surplus and Gasoline)	Crude Oil (in addition to Refineries Surplus and Gasoline)					Total Utilisation	Ending Balance**
	Beginning Balance*	Crude Oil Produced	Received Refineries surplus and Gasoline	Crude Oil Received from KRG		Refineries	Supplied to Midland Oil Company	Other*	Waste	Export Sales		
January	3,089,200	15,604,241	2,943,590	-	21,637,031	10,481,443	327,138	106,000	282,190	5,964,980	17,161,751	
February		13,617,696	2,024,187	-	15,641,883	8,008,264	345,840	-	200,000	8,197,583	16,751,687	
March		10,697,648	1,964,230	-	12,661,878	9,378,416	547,517	277,000	143	761,203	10,964,279	
April	34,703	8,406,896	1,799,809	-	10,241,408	7,761,253	335,899	1,784,838	95,567	-	9,977,557	
May		8,459,571	1,056,611	-	9,516,182	7,153,835	215,952	1,074,437	300	-	8,444,524	
June		4,833,080	816,084	-	5,649,164	3,131,223	140,546	2,958,962	60,320	-	6,291,051	
July		4,920,084	614,991	-	5,535,075	897,422	-	5,091,391	15,242	-	6,004,055	
August	24,000	4,652,100	698,728	38,042	5,412,870	905,511	-	4,233,223	51,922	-	5,190,656	
September		4,506,381	631,779	-	5,138,160	885,535	-	4,668,039	700	-	5,554,274	
October		4,707,926	565,781	-	5,273,707	913,556	-	4,531,892	30	873,717	6,319,195	
November		4,555,326	291,589	-	4,846,915	880,610	-	4,074,820	195	-	4,955,625	
December		4,662,311	292,029	-	4,954,340	914,204	-	3,701,897	20	-	4,616,121	4,277,838
Total	3,147,903	89,623,260	13,699,408	38,042	106,508,613	51,311,272	1,912,892	32,502,499	706,629	15,797,483	102,230,775	4,277,838

* *Quantities reported in April and August 2014 are quantities returned from the pipelines*
** *Other include re-injected quantities*

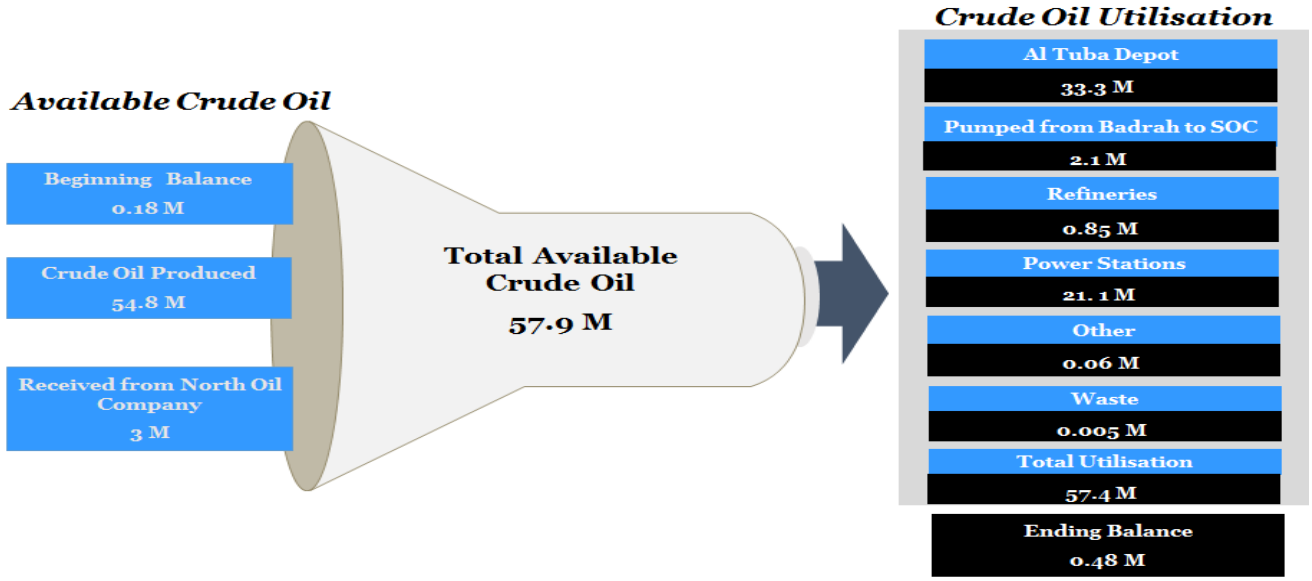


4. Further Transparency (continued)

4.2 Midland Oil Company Crude Oil Flow (in barrels - rounded)

Month / Reporting Items	Available Crude Oil			Total Available Crude Oil	Crude Oil Utilisation						Total Utilisation	Ending Balance
	Beginning Balance	Crude Oil Produced	Quantities Received from North Oil Company*		Al Tuba Depot	Pumped from Badrah Oil Field to South Oil Company	Refineries	Power Stations	Other**	Waste		
January	180,012	4,038,500	327,138	4,545,650	2,440,713	-	98,396	1,804,849	1,480	9	4,345,447	
February		3,702,028	345,840	4,047,868	2,371,161	-	85,765	1,604,511	2,629	-	4,064,066	
March		4,583,431	547,517	5,130,948	3,495,024	-	77,455	1,539,485	8,612	300	5,120,876	
April		4,387,984	335,899	4,723,883	2,781,726	-	65,837	1,861,196	(7,344)	955	4,702,370	
May		4,509,921	215,952	4,725,873	2,713,186	-	67,682	1,946,753	-	1,100	4,728,721	
June		4,259,095	140,546	4,399,641	2,520,935	-	78,287	1,802,153	9,155	-	4,410,530	
July		4,458,033	381,568	4,839,601	2,546,307	-	34,144	1,917,546	(8,369)	350	4,489,978	
August		4,947,327	72,855	5,020,182	2,902,839	283,239	82,633	1,875,824	34	150	5,144,719	
September		4,913,952	138,273	5,052,225	2,610,859	440,072	67,977	1,929,804	51,494	400	5,100,606	
October		5,153,820	181,652	5,335,472	2,977,059	470,369	68,345	1,620,633	3,653	525	5,140,584	
November		4,885,965	98,278	4,984,243	3,046,879	454,860	52,509	1,315,703	1,497	1,000	4,872,448	
December		5,007,207	271,326	5,278,533	2,912,171	493,067	79,799	1,894,004	(2,482)	292	5,376,851	586,923
Total	180,012	54,847,263	3,056,844	58,084,119	33,318,859	2,141,607	858,829	21,112,461	60,359	5,081	57,497,196	586,923

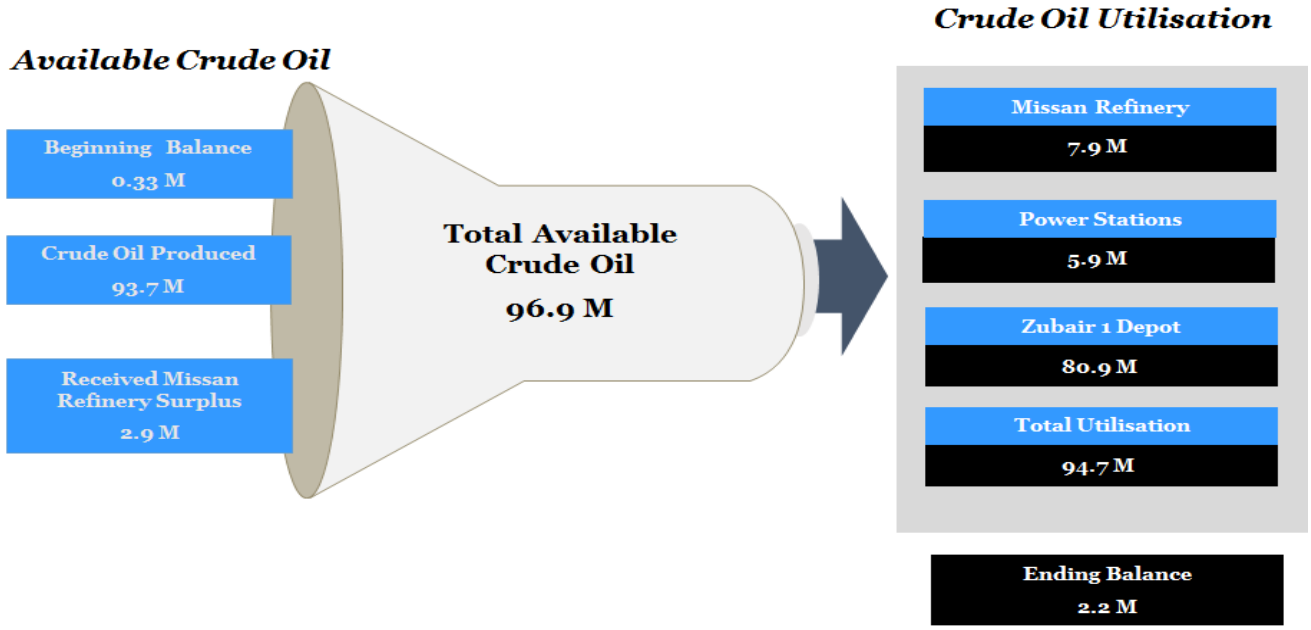
* *Quantities received from July 2014 till December 2014, represent quantities received from Strategic Pipeline (Dora-Wast Baghdad)*
** *Other includes differences in Oil Basins, and also includes quantities consumed by Gazprom in their related field of operations*



4. Further Transparency (continued)

4.3 Missan Oil Company Crude Oil Flow (in barrels - rounded)

Month / Reporting Items	Available Crude Oil (in addition to			Total Available Crude Oil (in addition to Refineries Surplus)	Crude Oil (in addition to Refineries			Total Utilisation	Ending Balance
	Beginning Balance	Crude Oil Produced	Received Missan Refinery surplus		Missan Refinery	Power Stations	Zubair 1 Depot		
January	336,742	5,642,463	112,901	6,092,106	541,276	588,703	4,650,784	5,780,763	
February		6,693,051	91,875	6,784,926	510,738	517,844	5,770,440	6,799,022	
March		7,331,577	282,525	7,614,102	751,713	479,942	6,446,370	7,678,025	
April		7,096,402	218,168	7,314,570	588,700	465,145	6,176,591	7,230,436	
May		7,241,079	207,104	7,448,183	722,384	457,944	6,386,351	7,566,679	
June		7,007,079	340,637	7,347,716	800,081	573,434	5,974,970	7,348,485	
July		7,106,686	267,537	7,374,223	641,528	631,434	6,073,440	7,346,402	
August		7,836,082	268,971	8,105,053	697,179	607,943	5,070,178	6,375,300	(1,681,283)
September		9,219,072	142,911	9,361,983	547,892	538,083	8,303,447	9,389,422	
October		9,673,094	379,307	10,052,401	819,657	378,465	8,840,544	10,038,666	
November		9,123,020	263,040	9,386,060	621,188	332,055	8,286,618	9,239,861	
December		9,790,481	337,411	10,127,892	676,545	415,272	9,016,628	10,108,445	2,107,709
Total	336,742	93,760,086	2,912,387	97,009,215	7,918,881	5,986,264	80,996,361	94,901,506	426,426

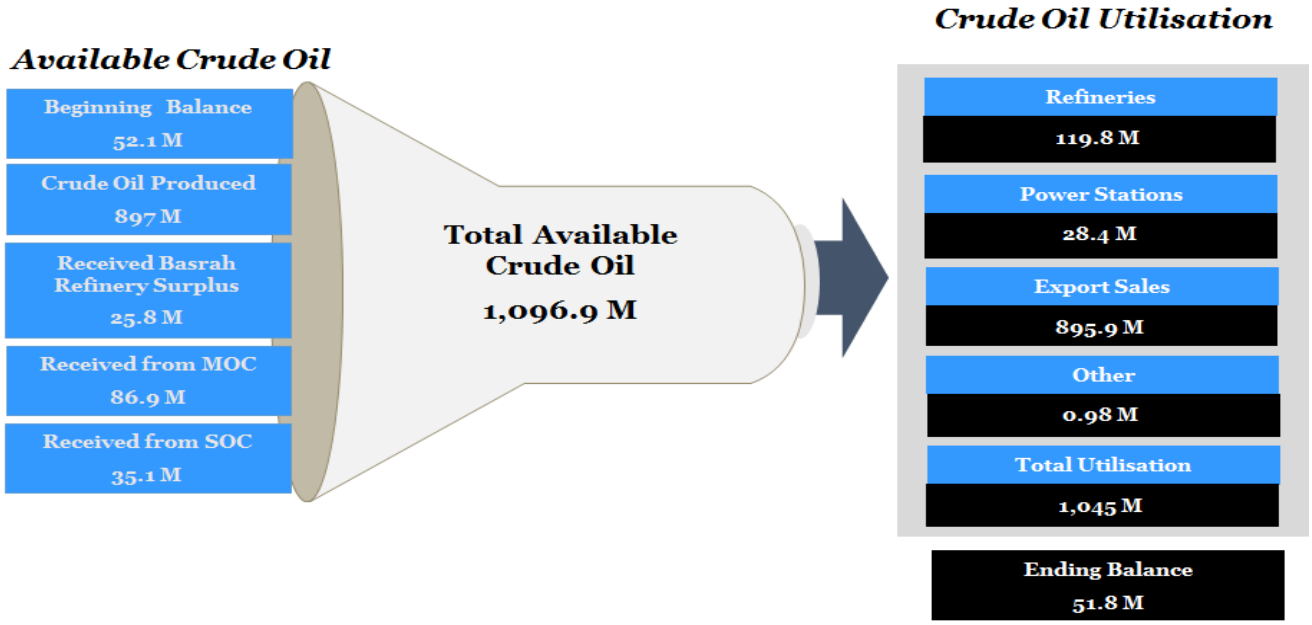


4. Further Transparency (continued)

4.4 South Oil Company Crude Oil Flow (in barrels - rounded)

Month / Reporting Items	Available Crude Oil (in addition to Refineries Surplus)					Total Available Crude Oil (in addition to Refineries Surplus)	Crude Oil (in addition to Refineries Surplus)				Total Utilisation	Ending Balance
	Beginning Balance	Crude Oil Produced	Received Basrah Refinery Surplus	Quantities Received from Missan Oil Company *	Quantities Received from Midland Oil Company		Refineries	Power Stations	Export Sales	Other**		
January	52,182,608	62,993,138	2,038,729	5,239,487	2,440,713	124,894,675	8,354,952	2,362,157	63,100,296	-	73,817,405	
February		71,460,371	1,255,567	6,288,284	2,371,161	81,375,383	7,229,481	2,241,471	70,190,413	5,604	79,666,969	
March		73,133,493	1,643,900	6,926,312	3,495,024	85,198,729	8,177,166	1,692,739	75,141,259	589,103	85,600,267	
April		72,040,907	2,255,508	6,641,736	2,781,726	83,719,877	8,818,103	1,576,484	73,690,720	-	84,085,307	
May		78,274,523	2,898,154	6,844,295	2,713,186	90,730,158	10,657,201	2,294,247	80,035,780	5,566	92,992,794	
June		77,222,055	2,832,224	6,548,404	2,520,935	89,123,618	10,989,549	2,453,033	72,786,208	-	86,228,790	
July		76,967,730	2,090,619	6,704,874	2,546,307	88,309,530	10,751,015	2,494,048	75,710,465	-	88,955,528	
August		76,249,361	2,306,786	5,678,121	2,902,839	87,137,107	10,478,531	2,828,599	73,638,608	381,564	87,327,302	
September		77,314,351	2,168,503	8,841,530	3,050,931	91,375,315	11,443,436	2,874,430	76,249,781	-	90,567,647	
October		75,130,857	2,191,180	9,219,009	3,447,428	89,988,474	11,891,060	2,802,475	75,986,895	-	90,680,430	
November		71,695,770	2,243,894	8,618,673	3,501,739	86,060,076	10,638,422	2,070,384	73,905,882	-	86,614,688	
December		84,570,579	1,944,954	9,431,900	3,405,238	99,352,671	10,424,333	2,807,922	85,561,998	-	98,794,253	
Total	52,182,608	897,053,135	25,870,018	86,982,625	35,177,227	1,097,265,613	119,853,249	28,497,989	895,998,305	981,837	1,045,331,380	51,934,233

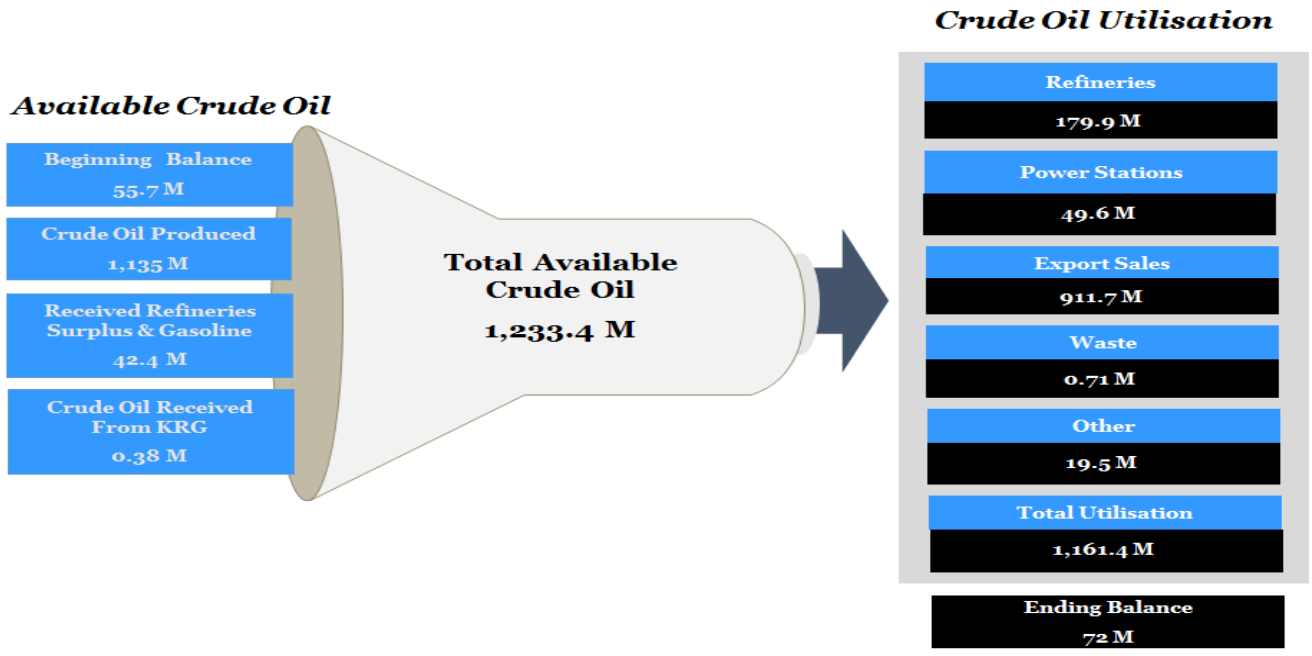
* *Quantities received from Missan Oil Company includes the quantities supplied to Power Stations*
** *Other includes quantities in the pipelines, and differences in quantities provided to Oil Tanks transferred to Al Quds Power Station. It also includes quantities supplied to Al Quds Power Station (East Baghdad) during the month of August 2014*



4. Further Transparency (continued)

4.5 Overall National Upstream Companies (NOC, Midland, Missan and SOC) Crude Oil Flow (in barrels - rounded)

Month / Reporting Items	Available Crude Oil (in addition to Refineries Surplus and Gasoline)				Total Available Crude Oil (in addition to Refineries Surplus and Gasoline)	Crude Oil (in addition to Refineries Surplus and Gasoline) Utilisation					Total Utilisation	Ending Balance
	Beginning Balance*	Crude Oil Produced	Received Refineries surplus and Gasoline	Crude Oil Received from KRG		Refineries	Power Stations	Other	Waste	Export Sales		
January	55,788,562	88,278,342	5,095,220	-	149,162,124	19,476,067	4,167,006	107,480	282,199	69,065,276	93,098,028	
February		95,473,146	3,371,629	-	98,844,775	15,834,248	3,845,982	8,233	200,000	78,387,996	98,276,459	
March		95,746,149	3,890,655	-	99,636,804	18,384,750	3,232,224	874,715	443	75,902,462	98,394,594	
April		91,932,189	4,273,485	-	96,205,674	17,233,893	3,437,680	1,777,494	96,522	73,690,720	96,236,309	
May		98,485,094	4,161,869	-	102,646,963	18,601,102	4,241,000	1,080,003	1,400	80,035,780	103,959,285	
June		93,321,309	3,988,945	-	97,310,254	14,999,140	4,255,186	2,968,117	60,320	72,786,208	95,068,971	
July		93,452,533	2,973,147	-	96,425,680	12,324,109	4,411,594	(8,369)	15,242	75,710,465	92,453,041	
August		93,684,870	3,274,485	38,042	96,997,397	12,163,854	4,704,423	381,598	51,922	73,638,608	90,940,405	
September		95,953,756	2,943,193	-	98,896,949	12,944,840	4,804,234	51,494	700	76,249,781	94,051,049	
October		94,665,697	3,136,268	-	97,801,965	13,692,618	4,423,108	4,535,545	555	76,860,612	99,512,438	
November		90,260,081	2,798,523	-	93,058,604	12,192,729	3,386,087	4,076,317	1,195	73,905,882	93,562,210	
December		104,030,578	2,574,394	-	106,604,972	12,094,881	4,701,926	3,699,415	312	85,561,998	106,058,532	71,980,840
Total	55,788,562	1,135,283,744	42,481,813	38,042	1,233,592,161	179,942,231	49,610,450	19,552,042	710,810	911,795,788	1,161,611,321	71,980,840



4. Further Transparency (continued)

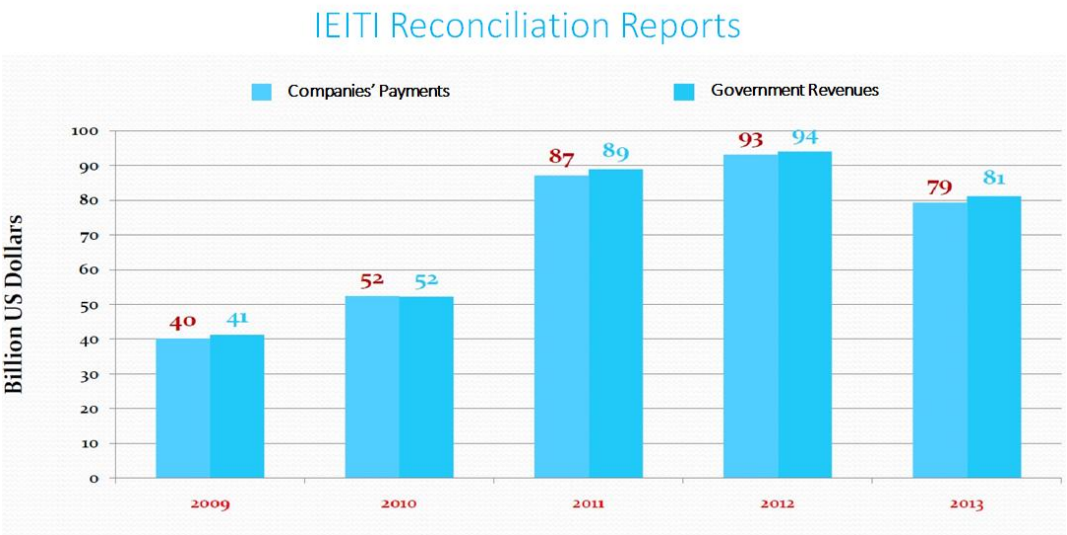
4.6 The impact of IEITI to raise the public debate and disclosure challenges about sale and pricing of Iraqi crude oil Mechanisms

How SOMO responded to IEITI requirements

- The first challenge was to accept the disclosure of export data.
- SOMO has listed a compliance clause in the standard contracts with the Extractive Industries Transparency Initiative requirements.
- Most of Oil buyers are International Companies supporting Extractive Industries Transparency Initiative.
- Member of SOMO and the National Initiative for Transparency are following up intensively on delay submissions of required data.

Iraq's commitment to the Extractive Industries Transparency Initiative

- Manage Iraq's resources wisely was the main objective to join the Transparency Initiative in 2008.
- On 12 December 2012, Iraq was announced as an EITI compliant country.
- Iraq has set an example through issuing the annual reports starting from 2009 and disclosing of its crude oil exports and revenues generated as a result, and matching what oil buyers have disclosed.
- Five reports issued (2009 – 2013) included the matching of the data disclosed by the four producing extractive companies.
- Since 2012 report, reports include data related to quantities lifted from service providers in exchange of their dues.

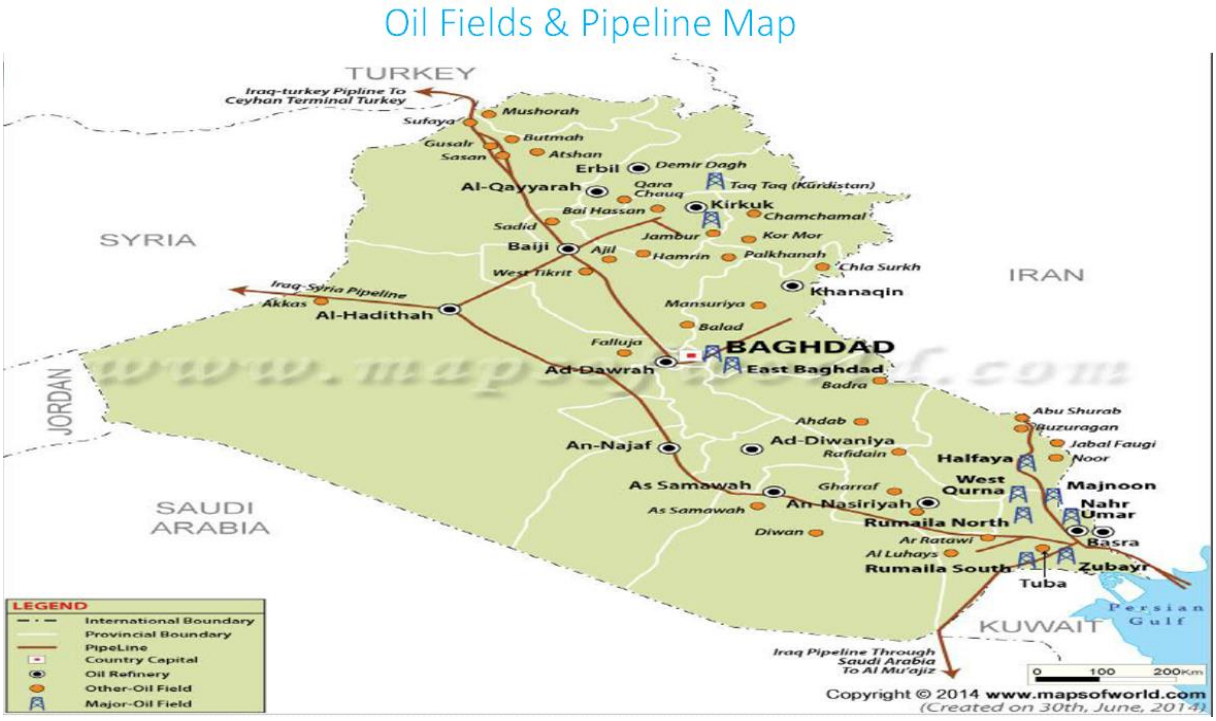


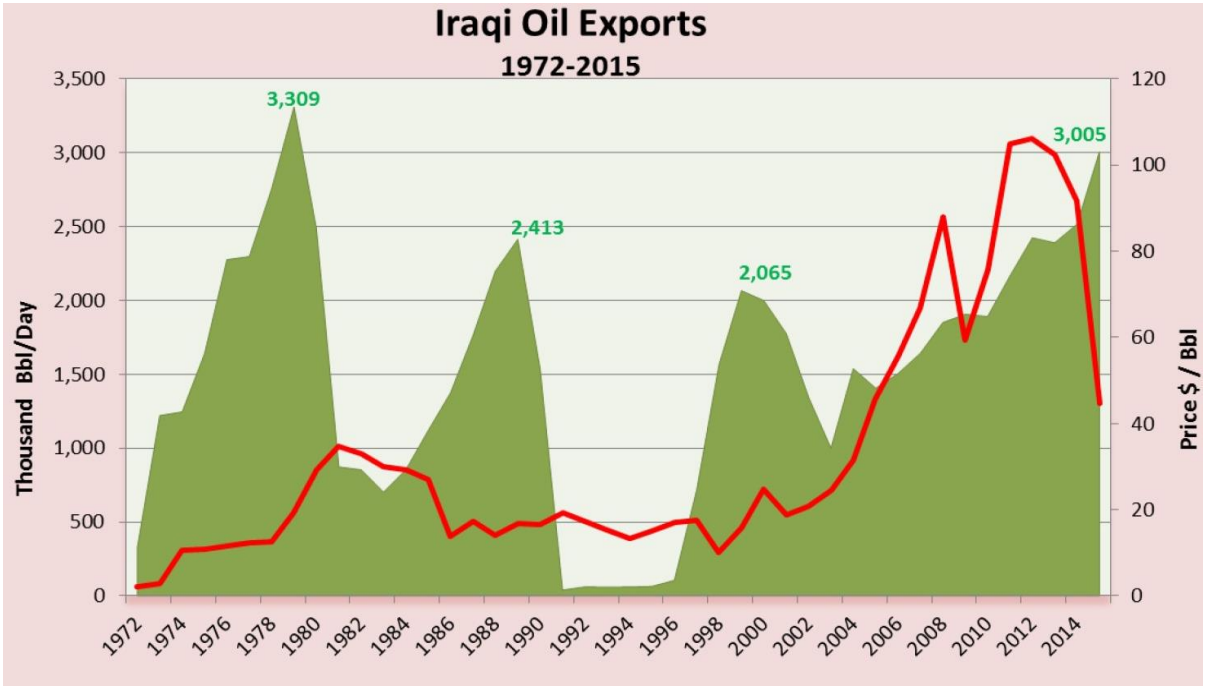
4. Further Transparency (continued)

Baba Karkar Well/1 October 1927

Iraq Oil Map in 1927

4. Further Transparency (continued)





4. Further Transparency (continued)

4.7 SOMO's Marketing Strategy

Strategic Vision

Reaching to a leading global position in higher marketing performance standards, and contribute effectively to support the global and Iraqi economy through the development of standards, principles and mechanisms that will reach maximum customers' satisfaction to customers and operate in the same time to maintain the market position of Iraqi crude oil, and increase our market share and revenues through adequacy, quality and the adoption of various marketing strategies.

We are confident that we are able to bring change in investment and provide economic support, and the establishment of genuine partnerships with producers and consumers in order to achieve integration in the field of oil and gas marketing.

Strategic Mission

We put all our efforts to become among the best companies in the world in the field of marketing of fossil energy sources (oil, gas and other petroleum products) by providing access to these sources to customers at any time and place to achieve the greatest possible return to the country and to create added value to support the development country's economy.

Strategic Objective

We aim to market all available quantities of crude oil and gas for export in higher possible return, adopting diversification strategy in the markets, focusing within each market on the most promising areas within it; by building a company with high marketing experience and competitiveness in the international arena.

4.8 Sale of Iraqi crude oil mechanisms (allocation criteria)

Sales Technique

SOMO sells Iraqi crude oil on the basis of loading port as follows:

1. Long term sales contracts:
   - Direct invitation to contracting companies.
   - Purchase requests for new companies (receipt, study and analysis).
2. Reimbursement contracts:
   - Pay service contractors dues through investing companies in petroleum licensing rounds

Adopted Basis in Allocation

Number of basis are taken into consideration when the contractual amounts are allocated to qualified companies (previously contracted with and new) as follows:

- Marketing of all available quantities of Iraqi crude oil for export in the international markets using the international pricing modules.
- Give priority in the allocation of quantities to companies that hold large filtering capacity.
- Expansion of Iraqi crude oil penetration in key global markets.
- Give priority to the Asian market being more developed markets.

4. Further Transparency (continued)

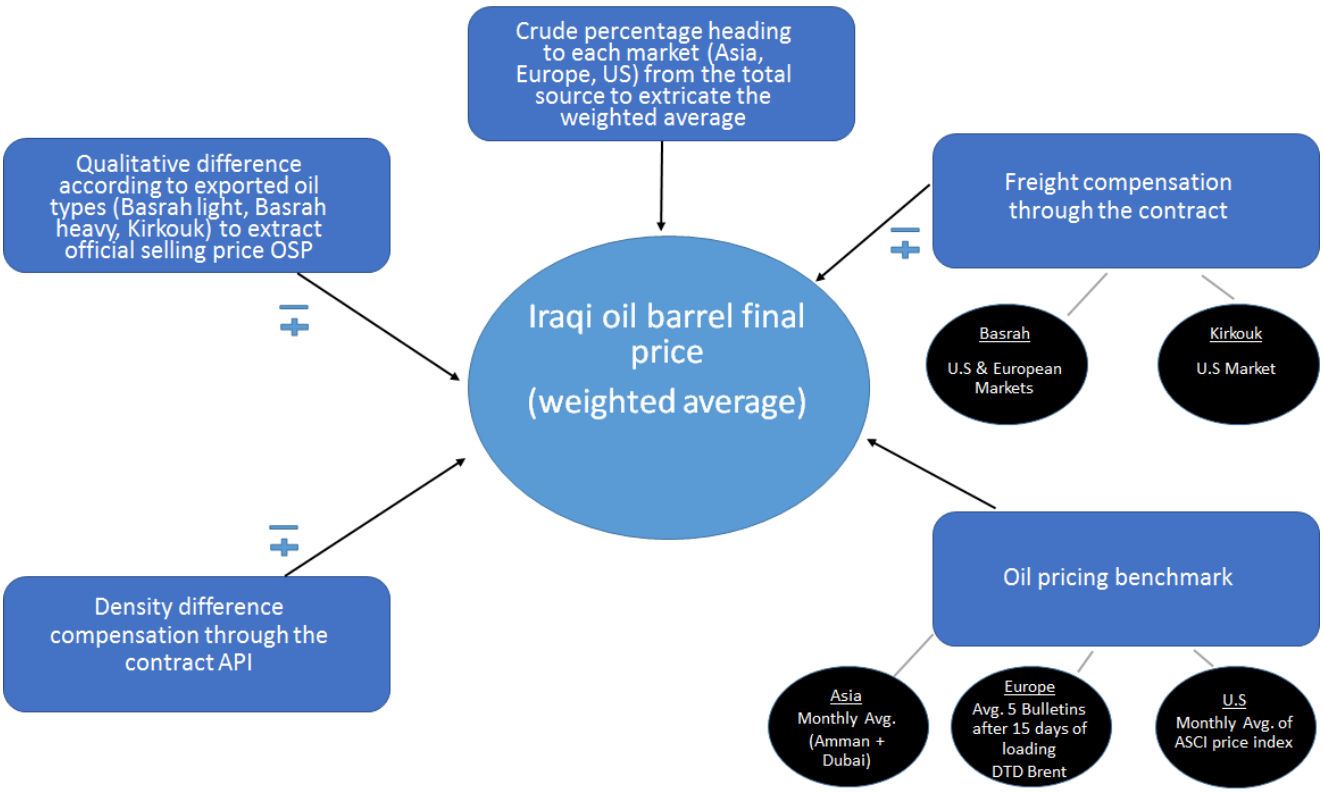
Allocation Criteria

Number of standards are adopted when allocating contractual quantities to qualified companies as follows:

1. First Standard – Solid International Oil Companies: includes well known international oil companies (big and medium size), independent, governmental, solid companies and has filtering capabilities and distribution network in many countries.
2. Second Standard – Filtering Companies: includes companies majoring in filtering industry and distributing oil products.
3. Third Standard – Authorized Companies: companies classified as a main provider to filtering companies in their country, such as in Japan.

4.9 Pricing Criteria

Iraqi Crude oil pricing elements



4. Further Transparency (continued)

Exported Barrel Pricing Formula

Exported crude oil barrel is priced as the following formula:

Final Price (USD / Barrel) =

Certified reference oil price as per shipment destination (for the loading accepted month)

±

Price difference which is calculated on a monthly basis (official selling price OSP)

±

Price difference for density fluctuation (API)

±

Freight cost

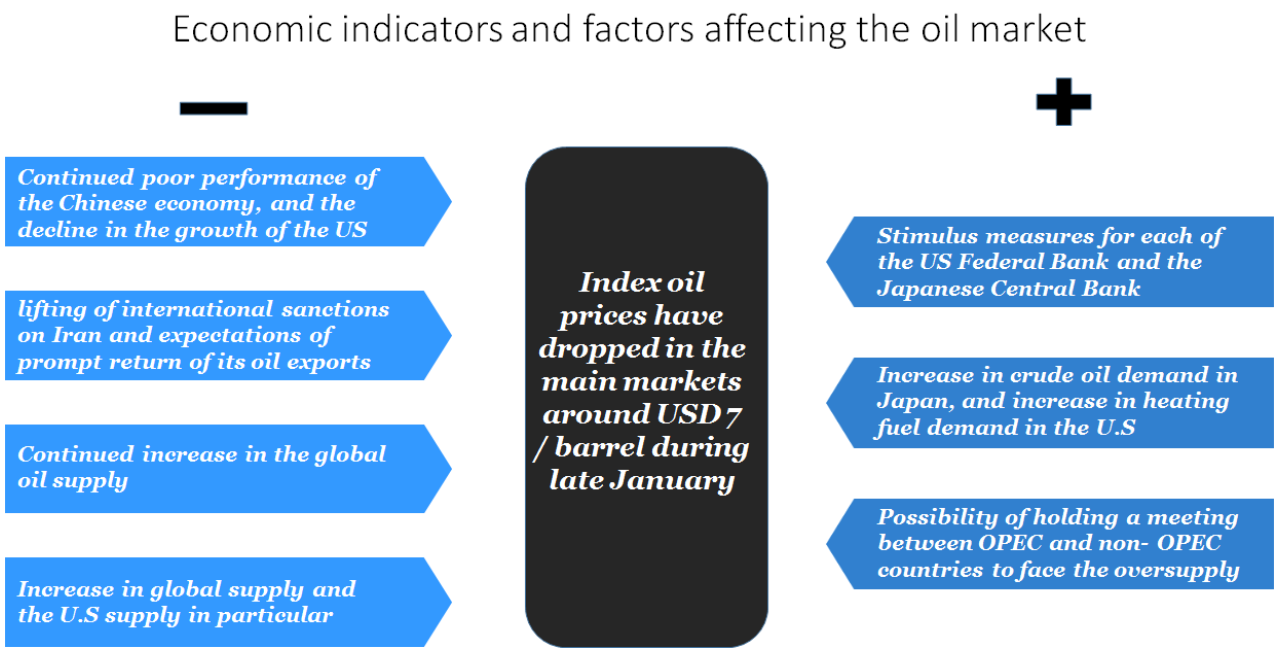
Official Selling Price

Official selling price (OSP) is considered as a basis for pricing Iraqi crude oil for the following reasons:

1. Unify prices for all buyers in every market.
2. Transparency in dealing with customers.
3. Avoiding negotiations.
4. Adoption of marker crude in concerned market which determines oil price in trading market Nymex, ICE, DME on the basis of change in supply and demand trends in each market.

Pricing difference calculation standards according to OSP mechanism

1. General indicators:
    a) Economic indicators and factors affecting the oil market:



4. Further Transparency (continued)

b) Global supply and demand for crude oil:

- Studying and analyzing crude oil demand is being conducted in a monthly basis for the three main markets in general, and demand directions for sour or light crudes in particular. As the price and demand are the two main factors affecting barrel price in light of the stability of other factors.
- Since the policy for the export of Iraqi crude oil are for firms that own filtering systems, it is necessary to study and analyze the changes in oil products demand (light, medium and heavy) to reflect the changes in produced crude oil demand.

c) Production of member states of the OPEC:

- Given to what produced crude oil exported by OPEC countries represents (a significant proportion in glob oil market), the organization's trends have been studied through production rates and exports of the member states and their role in maintaining a balance in the oil market to maintain the market value of crude oil in the world.

d) Strategic and commercial storage of oil:

- The change in global oil inventories, especially the industrialized countries in the Organization for Economic Cooperation and Development (OECD) and the rest of the world, affects directly and concretely on the demand for crude oil and petroleum products, which in turn is reflected in the price levels of the expected rates.

e) Freight market:

- As reflected in the crude tanker market (Dirty Tankers) of demand direction on crude oil from market to another and the effect that follows it positively or negatively on the volume of purchased crude oil volumes and the impact of this price levels, which gives the possibility to predict prices direction in the near term.

2. Calculation standards:
   a) Movement of index oil prices in each market (Asia, Europe, and U.S).
   b) Supporting and non-supporting factors.
   c) Pricing formulas to calculate quantitative variances.

3. Marketing considerations:
   a) Recent oil market variables.
   b) The competitive situation of Iraqi crude oil in the global market.

Variance analysis

1. Study and analysis of the difference between index oil price and the price of fuel oil product high sulfur content:
   - Studying and analyzing the difference between the price of Dubai crude oil prices and the prices of high-sulfur fuel oil product deals in the Singapore Stock Exchange for futures and current trading, where this indicator reflects the amount of improvement or a decline in demand for medium sour crudes.

2. Forward price structure for Dubai Index Oil:
   - Studying and analyzing the structure of prices in Dubai oil forward deals trading in Singapore Exchange Market, and the objective of this is to study and analyze the nature of the differences and the demand for oil in the extended period between pricing month, loading month and arrival of the tanker to the consumer market month, in order to preserve the economic value of the oil for both seller and buyer.

3. Study and analysis of filtering proceeds of Iraqi crude oil and compare it to similar oil:
   - Depending on the Spiral Csi program (which is one of the most used programs in the field of economic returns to the process of filtering). realized returns from Iraqi crude oil are being studied and analyzed on the revenue accruing from similar oil in the relevant market, which reflects the profitability or losses realized by both oil types (Iraqi and similar oil).

4. Further Transparency (continued)

4. Marketing considerations:
   - Despite the reliance on the previous equations in the qualitative differences between the Iraqi crude oil and index oil accounted for in calculating the final price for a barrel of the source of crude oil, there are many economic, technical and geopolitical market variables which are inherently factors descriptive non-quantifiable, are taken into account depending on experience, the skill of the marketer and his reading of the oil market.

5. Study and analysis of the competitive position of Iraqi crude oil:
   Studying and analyzing the competitive position of Iraqi oil official prices list compared to the official stated crude prices in Gulf Countries, such as Saudi Arabia, Kuwait and Iran.

Factors contributed to the decrease in index oil prices in the U.S market (ASCI)

- Increase in the US dollar exchange rate against the euro.
- The continued increase in the global supply of crude oil, in particular in the U.S.
- Increase in the U.S crude stocks in general by 7.5 million barrels.
- Increase in the U.S crude oil inventories in Cushing tanks by 400 million barrels to reach 63.4 million barrels.
- The imminent return of Iranian oil exports to the market and lift the first load by BP during mid of April 2016.

Mining Industries in Iraq

5

5. Mining Industries in Iraq

The below context was prepared by Iraq Energy Institute (IEI).There were no major updates on this study during year 2014 due to the security challenges in the extraction fields areas, in addition to the weak extraction activities due to the lack of clear mining extraction plans.

5.1 Mining Industry in Iraq

In addition to Iraq's oil and gas resources, it possesses substantial mineral resources and some of the world's richest reserves including sulfur and phosphate. Up until recently, Iraq's Civil Society was not informed of, nor could it participate in debates regarding oil, gas and mineral production. The Iraqi public was not able to set production, exploitation and marketing policies with regard to Iraq's mineral resources, since sector-specific information was not public knowledge, and private participation to invest in such sectors was not open to Iraqi Nationals. After 2003, it became imperative to develop such policies, in order to regulate the exploitation of such resources in a manner that guarantees transparency and hence attracts investment that could further develop the industry through improving the image of Iraq in terms of being a reliable business partner and a safe destination for Foreign Direct Investments. The following data was provided by the Ministry of Industry and Mining (MIM).

5.2 Vision

Iraq will become a competitive regional player in the mining industry and it will make the industry a base for industrial growth and a mean for satisfying local market needs, and creating jobs for Iraqis. In addition it will be a leader in infrastructure and social development in remote areas in Iraq, which contributes to the sustainable development of the country.

5.3 Estimated Reserves

The Ministry of Industry and Minerals (MIM) of Iraq estimated the proved phosphate reserves in the country to be 9,529,090,000 metric tons (Gt), placing Iraq in global top ten for phosphate rock reserves[1]. A 2014 report on global phosphate reserves described the rock as "the foundation of modern agriculture" and noted its price volatility, with a 900% price spike occurring in 2008.[2]

The US Geological Survey have placed Iraq's limestone reserves at over 4.2 Gt, while MIM estimate 8 Gt. This is an important resource for a country that was predicted in early 2014 to consume 21 million tons of cement for the year, with both production and consumption forecast to rise rapidly by 2020.[3]

For kaolinitic clays, mostly found in the western desert in Al Anbar, MIM estimate 1.2 Gt of reserves, although mining operations in Anbar were seriously disrupted in late 2013 and 2014 by ISIL, as was the case with several of Iraq's main mineral deposits and mines, listed in this chapter.

In addition to large reserves of phosphate and limestone, Iraq also has significant reserves of native sulfur, in the region of 600 mt, although these reserves are located in Ninewa governorate, which was occupied by ISIL in 2014.[4] Iraq also has a number of other mineral reserves where production figures are not listed by MIM such as dolomite, gypsum, glauberite, montmorillonitic clays and porcelanite. Iraq is still assessing its reserves of copper, lead, marble and zinc.

[1] http://minerals.usgs.gov/minerals/pubs/commodity/phosphate_rock/mcs-2015-phosp.pdf

[2]https://www.ifw-members.ifw-kiel.de/publications/global-availability-of-phosphorus-and-its-implications-for-global-food-supply-an-economic-overview/KWP%201897.pdf

[3] http://www.worldcement.com/africa-middle-east/02072014/Cement_global_viewpoint_Middle_East_426/

[4] http://minerals.usgs.gov/minerals/pubs/country/2012/myb3-2012-iz.pdf

5. Mining Industries in Iraq (continued)

5.4 MIM Estimated Mineral Reserves

Mineral Ore	Recorded Reserve	Production and Uses
Sulphur	900 (million ton)	Phosphatic fertilizers and export
Phosphate	9500 (million ton)	Phosphatic fertilizers industry
Silica Sand	400 (million ton)	Glass, ceramic and refractories industries
Kaolin	1150 (million ton)	Ceramic and refractories industries
Bentonite	350 - 385 (million ton)	Oil industry
Iron	80 (million ton)	Cement industry
Limestone	9500 (million ton)	Brick and cement industry
Glaubente Salt	35 (million ton)	Sodium sulphate production
Bauxite	1.2 (million ton)	Refractories industry
Flint Clay	9 (million ton)	Refractories and white cement
Feldspar Sand	3.2 (million ton)	Ceramic industry
Salt	43 (million ton)	Chemicals, nutritional, textile, and drilling industries
Gypsum	195 (million ton)	Construction
Attapulgite clays	0.5 (million ton)	Drilling mud
Porcellanite	1.4 (million ton)	Filtration substances
Dolomite	675 (million ton)	Magnesia and building materials
Metals	2.7 (million ton)	None
New Clays	685 (cubic meter)	Brick and cement industries
Gravel and Sand	1630 (cubic meter)	Raw materials for construction

5. Mining Industries in Iraq (continued)

5.5 Targeted extracting capacities

Mineral Ore	Year			Uses
	2017	2022	2030	
Phosphate (million ton)	5	13	25	Phosphatic Fertilizers
Free Sulfur (million ton)	2	4	10	Chemical Industries
Limestone (million ton)	20	30	50	Cement Production
Silica Sand (million ton)	0.5	1	3	Silicon, Glass, and Ceramics
Kaolin (million ton)	0.2	0.5	3	Alumina and Ceramic Industries
Bentonite (million ton)	0.1	0.3	0.8	Drilling mud for oil wells & Concrete Pillars
Salt (million ton)	0.3	0.8	3	Petrochemical and Chemical Industries, Nutritional, Textile, and Drilling Industries
Gypsum (million ton)	0.5	1	3	Construction Materials
Iron (million ton)	0.1	0.3	0.5	Cement Production
Brick Clay (million cubic meters)	10	20	50	Construction Materials
Gravel and Sand (million cubic meters)	50	100	200	Construction Materials

5. Mining Industries in Iraq (continued)

5.6 MIM production and consumption data for 2014

The Ministry of Mining and Minerals (MIM) submitted a table listing the production and consumption of 16 minerals in 2014 in tons. For 6 of these minerals, the figure for both production and consumption was 0 tons. These are not included in this chapter, but were listed as iron from the Jebid al Abid deposit, kaolin from the Wadi al Sofi, coloured kaolin, bauxite, flint clay and feldspar sand. The MIM figures for minerals produced and consumed in 2014 are listed below:

No.	Commodity	2014	
		Production (Ton)	Local Consumption Sales / (Ton)
1	Industrial Salt / Samawa	200,148	162,418
2	Raw Salt / Basra	0	1,900
3	Iron (Al Hussainiat, Anbar)	0	6,464
4	Kaolin	0	325
5	Silica Sand (Glass & Ceramic)	89	89
6	Silica Sand (White & Ceramic)	2,983	2,983
7	Silica Sand (Black & Ceramic)	60	60
8	Bentonite	256	266
9	Standard Sand	39	34
10	Filter Sand	24	24
Total		**203,599**	**174,563**

It can be noted from the above table that for certain items there were no production during the year 2014 while there was local consumption. This was explained by the Ministry of Industry and Minerals through having old inventory.

Industrial Salt:

Production: 200,148 tons

Consumption: 162,418 tons

MIM reported a surplus of industrial salt production of 37,730, and stated for this report that this was not exported. Most industrial salt production is comes from the Bahr al Milh, or Salt Sea which is 70 km southwest of Samawah and is the main source of industrial salts in Iraq, with 50 m.t. of proved reserves.

5. *Mining Industries in Iraq (continued)*

Raw Salt:

Production: tons 0

Consumption: 1,900 tons

Raw salt is used in the meat, dairy and tannery industries and the 1,900 ton figure submitted by MIM likely refers to rock salt, or halite, of which deposits exist in the Jazira region of Anbar, north of Hit. Other halite deposits also exist at the Shari salt marsh in Salahaddin,[5] which would explain why production was halted (poor security.) [6]

Iron (Al Husseiniat)

Consumption: 6,464 tons

Production: 0 tons

The figure here refers to iron mined from the Hussainiyat ironstone deposit located near Rutbah, Al Anbar province, extracted prior to 2014.[7] The iron consumption listed as 6,464 tons refers to iron used in cement production, as stated by the National Investment Commission, [8] who also note that "The raw materials of depository origin iron in the western desert in the Anbar Governorate are considered of weak quality due to the presence of sand and mud impurities." Iron extraction would have become progressively more difficult due to the security situation in Anbar, which began to deteriorate in 2013.

Kaolin:

Consumption: 0 tons

Production: 325 tons

Iraq's Kaolin deposits are centered in the western desert in Anbar province and were extracted prior to 2014 from the Dwaikhla open cast-mine, located north of Rutba. [9] This area fell under ISIL control in mid-2014, but government control was weakening through 2013.

Kaolin in Iraq can be used for white cement, ceramics, thermal materials, electrical isolators, porcelain filters and crucibles for melting metals.

[5] http://www.uoanbar.edu.iq/DesertStudiesCenter//catalog/HYDROGEOCHEMICAL%20%20MODEL.pdf

[6] Jassim, S, Goff, J (2006) *The Geology of Iraq*. Dolin, Prague and Moravian Museum. P.299

[7] http://pubs.usgs.gov/of/2014/1240/pdf/ofr2014-1240.pdf

[8] http://www.iraq-jccme.jp/pdf/seminor02.pdf

[9] http://pubs.usgs.gov/of/2014/1240/pdf/ofr2014-1240.pdf

5. *Mining Industries in Iraq (continued)*

Sand

Silica sand (glass, ceramic) Production: 89 tons Consumption: 89 tons

Silica sand (white and ceramic) Production: 2,983 tons Consumption: 2,983 tons

Silica sand (black and ceramic) Production: 60 tons Consumption: 60 tons

Silica sand extracted in Iraq for the uses listed by MIM is largely centred in Al Anbar and the estimated capacity for mining silica sand was 150,000 tons per year in 2010, with much production expected to be used in the glass, ceramic and white cement industry.[10] Powdered silica can also be used in drilling fluid in oil extraction.[11] These industries in Anbar and surrounding provinces were disrupted by deteriorating security In 2013-2014. The Ramadi glass factory, which re-started production in 2012,[12] is located in an area which saw increasing ISIL presence throughout 2014, while another nearby glass factory at Al Taji, north of Baghdad, is also located in an area which saw poor security in mid-2014. [13]

Local consumers of white cement in 2014 included sites such as the Fallujah white cement plant which had a nameplate capacity of 140,000 tons and was operational before 2014. Fallujah fell under ISIL control in January 2014.[14] Other cement plants in Al Anbar which would have had use for sand extraction are Kubaisa, 200 km west of Baghdad towards the Syrian border and Al Qaim cement plant, which fell under ISIS control in June 2014,[15]while industrial sites such as the Abu Ghraib concrete sleeper factory (which had a contract to supply 60,000 concrete sleepers for Iraqi railway expansion) is located in an area of heavy ISIL presence, as of March 2014, [16] although the security situation there stabilized by late 2014.

Bentonite

Production: 256 tons

Consumption: 266 tons

Bentonite is used for drilling mud, also known as “drilling fluid” in the oil industry. It is used in boreholes to cool and lubricate drilling equipment and seal the borehole to prevent the escape of liquids in the hole, as well as preventing the borehole from caving in.[17]

[10] http://minerals.usgs.gov/minerals/pubs/country/2013/myb3-2013-iz.pdf

[11] http://www.iraq-jccme.jp/pdf/seminor02.pdf

[12] http://www.iraq-businessnews.com/2012/07/17/glass-factory-resumes-production-after-10-years/

[13] Farid. S *Sustainable Technological Route to Produce Ceramic Electrical Insulators in Iraq. Energy Procedia: Volume 36.* P.908-914. Available online.

[14] http://www.almaysarahgroup.com/en/business-domain/cement-plant

[15] http://www.almaysarahgroup.com/en/business-domain/cement-plant

[16] http://iswresearch.blogspot.co.uk/2014/04/iraq-update-2014-15-warning.html

[17] http://www.rigzone.com/training/insight.asp?insight_id=291&c_id=24

5. *Mining Industries in Iraq (continued)*

Standard sand:
Production: 39 tons
Consumption: 34 tons
Filter sand:
Production: 24 tons
Consumption: 24 tons

Standard sand is used in the cement industry and filter sand is used in water purification. While sand quarries in Anbar faced security disruption in 2014, a number of sand and gravel quarries are located in southern Iraq, subsequently out of reach of the 2014 ISIL offensive. These quarries are Safwan and Al Butain in Basra and Arar and Al Taq quarries located in the Karbala area. Sand use for cement depends on the specifications of the sand, but other uses of sand in Iraq are in road construction and the production of bricks.[18]

Limestone
Production: 904,500 M3
Consumption: Not listed

Iraq has estimated reserves of between 4.2 billion[19] and 8 gt of limestone, generally regarded as being of very high quality with a high percentage of calcium carbonate ($CaCO_3$), meaning that theoretically, more cement will be made per ton of limestone extracted. [20] Iraq had projected cement production for 2014 of 22 Mt/yr[21], although as noted much activity was disrupted by the ISIL offensive. Note that for 2014, the figure listed is in cubic metres, while available data for 2013 shows an estimated 5000 tons of limestone was extracted for cement production. [22]

Despite this disruption, cement production continued in southern Iraq and the KRI through 2014. Lafarge reported that its Karbala plant, which it operates in partnership with the Southern Cement State Company[23] (a part of MIM) faced only minor disruption post June 2014, although disruption to transport and sales across the country were more serious. Lafarge noted, "In Iraq, cement volumes decreased 17% compared to 2013. Indeed, the solid growth experienced in the first five months of the year was offset by significant drop in volumes from June, due to the reduced ability to transport cement across the country."[24]

[18] http://www.iraq-jccme.jp/pdf/seminor02.pdf

[19]http://www.miningweekly.com/print-version/middle-eastern-country-has-potential-to-be-a-top-world-phosphates-producer-2011-09-16

[20] http://www.globalcement.com/magazine/articles/746-iraqi-cement-focus

[21] http://minerals.usgs.gov/minerals/pubs/country/2013/myb3-2013-iz.pdf

[22] http://minerals.usgs.gov/minerals/pubs/country/2013/myb3-2013-iz.pdf

[23] http://www.southern-cement.com/m-karbala.htm

[24]http://www.lafarge.com/sites/default/files/atoms/files/04302015-publication_sustainable_development-sustainable_report_2014-uk.pdf

5. Mining Industries in Iraq (continued)

The Southern Cement Company notes a number of raw material sources for its different cement plants, for example the Kufa and Najaf plants receive material from "stone quarries at the Sea of Najaf" (Bahr al-Najaf) where a limestone quarry is located. [25]

MIM stated for this report that the production quantity of limestone in 2014 was (904,500) m3 and 2015 is (2,705,975) m3.

Phosphate rock

According to MIM, the state owned General Company for Phosphate was not working through 2014 because of security issues.

Iraq's estimated reserves of 9,529,090,000 metric tons[26] of phosphate are concentrated in Al Anbar, in the Paleocene Akashat Formation, near Al Qaim on the Syrian border.[27]The Akashat phosphate mines in this area were the centre of Iraq's fertilizer industry prior to 2014, although the nearby phosphate plant built in the 1980s fell into disrepair and was operating at a fraction of its 3.4 million ton/ year design capacity prior to 2014. [28] Other main deposits of phosphate are also in Anbar in the region of the Akashat formation, at Wadi al Hirri and Swab. [29] Iraq's phosphate is mostly medium grade, with an average 21.47% P2O5 content, although some deposits at Swab have 26% P2O5 and the size of reserves has been characterized as "world class" by the US Geological Survey. [30]

Al Qaim was captured by ISIL in June 2014.[31] According to the Iraqi government, by December 2014 ISIL were moving phosphate from Al Qaim over the border into Syria to use in the construction of explosives.[32] While fertilizer production in Anbar was disrupted by ISIL, by the end of 2015 Basra was expected to have a 56,000 ton capacity fertilizer factory, although this was for nitrogenous fertilizer from ammonium rather than phosphate. [33]

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[25]http://www.academia.edu/9371580/Assessment_natural_radioactivity_of_marl_as_raw_material_at_Kufa_Cement_Quarry_in_Najaf_Governorate

[26]https://www.unece.org/fileadmin/DAM/energy/se/pp/unfc_egrc/unfc_ws_IAEA_CYTED_UNECE_Santiago_July2013/12_July/4_Benni_Iraq_PhosDepos.pdf

[27] http://www.industry.gov.iq/upload/upfile/ar/94hrear.pdf

[28] http://www.sulphuric-acid.com/sulphuric-acid-on-the-web/acid%20plants/State%20Company%20for%20Phosphates.htm

[29]https://www.unece.org/fileadmin/DAM/energy/se/pp/unfc_egrc/unfc_ws_IAEA_CYTED_UNECE_Santiago_July2013/12_July/4_Benni_Iraq_PhosDepos.pdf

[30] http://www.miningweekly.com/article/middle-eastern-country-has-potential-to-be-a-top-world-phosphates-producer-2011-09-16

[31]http://www.ft.com/cms/s/d46a78f0-f932-11e3-bb9d-00144feab7de,Authorised=false.html?siteedition=uk&_i_location=http%3A%2F%2Fwww.ft.com%2Fcms%2Fs%2F0%2Fd46a78f0-f932-11e3-bb9d-00144feab7de.html%3Fsiteedition%3Duk&_i_referer=https%3A%2F%2Fwww.google.co.uk%2F6666cd76f96956469e7be39d750cc7d9&classification=conditional_standard&iab=barrier-app

[32] http://english.alarabiya.net/en/News/middle-east/2014/12/01/Iraqi-says-ISIS-transferring-phosphate-to-Syria-s-Raqqa.html

[33] http://www.iraq.emb-japan.go.jp/documents/2015April4.pdf

5. *Mining Industries in Iraq (continued)*

Sulphur

Iraq's main sulphur deposit is located at Qaiyarah, near Mosul in Ninewa governorate, while a smaller deposit is located in Kirkuk province. The Mishraq sulphur mining and processing complex was operational in 1972 and went on to produce sulphur fertilizer and sulphuric acid but fell into disrepair following looting and a severe fire in 2003.[34] In 2012, the Export-Import Bank of the United States guaranteed a $35 million loan from JP Morgan to rehabilitate the plant to reach a 500,000 ton capacity in 2014.[35] In May 2014, US-based engineering firm Devco shipped $53 million worth of equipment to the newly developed Mishraq State Sulfur Mine, including 43 modular units and 200 crates of piping and other equipment.[36] This effort was cut short by the June 2014 ISIL offensive.

MIM Strategic Goals to 2017

In the MIM authored section of the 2013 IEITI report, the ministry listed a series of short, long and medium term goals. The short term objectives were to 2017, and while some objectives have made progress, other goals have encountered severe difficulty by the end of 2014. Short term goals are assessed here.

MIM listed a number of challenges for this report. These were the ongoing absence of a law concerning mineral investment for foreign companies and the absence of security at sites containing minerals, in particular phosphate and sulpher. Furthermore, MIM noted that "the process of issuing licenses is complicated and takes a very long time."

MIM noted that there are no organized working procedures for investors in the mineral sector and there is no investment from the government through new investment companies, although the old investment companies are working slowly, since 2003.

According to MIM, the budget allocated for developing the mineral sector in 2014 was (600,000,000) six billion Iraqi dinars.

Enabling private sector investment in the Minerals Sector

Areas of mineral deposits, mines and processing facilities in Anbar, Ninewa and Salahadin were disrupted or taken over by ISIL in 2014. Southern Iraq saw the realization of a number of projects in 2014 and the continuation of many existing operations in the cement industry.

On the 30th of March 2014, China National Building Material International opened a 3300 ton a day clinker production line in Muthana, following the signing of a contract in 2010 .[37] In February, a 3000 ton a day capacity grinding mill for sulphate resistant cement came on line near Basra, operated by Pakistan's Lucky Cement, and this was hoped to reach production of 1.25 million tons a year.[38]

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[34] Jensen D. Lonergan S. (2012) *Assessing and Restoring Natural Resources in post conflict peacebuilding*. Routledge. New York.

[35] http://www.exim.gov/news/ex-im-approves-35-million-loan-guarantee-finance-export-us-products-and-expertise-iraq

[36] http://www.iraq-businessnews.com/2014/05/29/devco-ships-53m-kit-to-sulfur-mine/

[37] http://www.worldcement.com/africa-middle-east/07082014/CNBM-constructed-clinker-line-begins-production-in-Iraq-255/

[38] http://www.iraq-businessnews.com/2014/04/07/lucky-cement-starts-production-in-iraq/

5. *Mining Industries in Iraq (continued)*

Lafarge reported strong sales in the first half of 2014, although this was offset by the ISIL offensive. As stated, Iraq's cement consumption was forecast in 2014 at 21 million tons.

Creation of an Iraqi Minerals Board

According to MIM plans, by 2017 an Iraqi Minerals Board is supposed to have been created, and MIM stated for this report that the board might be created on time, with the aim of overcoming investment barriers.

Increased coordination and revenue sharing between federal and provincial governorates

MIM announced a goal of "integrating the role of the central government with local governments of mineral producing provinces with regards to mineral investments and returning a greater portion of investment returns to those provinces." MIM stated for this report that this goal had not been met.

Strengthening the role of the Iraqi Geological Survey and Mining Company

Company's branches in provinces to strengthen relations with local governments, the private sector, and the society as a whole." According to MIM, a plan for the Iraqi Geological survey and Mining has been opened at the provinces and is still under development. MIM hoped that if implemented, the plan would strengthen the working relations with the provinces.

KRG Extractive Industry

6

6. Kurdistan Regional Government Extractive Industries

The Federal Government View

6.1 Since limited data was provided by the Kurdistan Regional Government (KRG) Ministry of Natural Resources (MNR) for this chapter, IEITI Stakeholder Council has requested the inclusion of information about the extractive industry in KRG based on publicly available information. IEITI Stakeholder Council assumes no responsibility for the information contained in this chapter.

6.2 The chapter provides a general overview of the extractive industries (including oil and gas) in Kurdistan Region of Iraq (KRI) through the use of excerpts from governmental and public websites. The focus of this chapter is to present the Federal Government perspective on oil and gas activities in the KRI, based on statements from the Ministry of Oil (MoO) and the official position of the Ministry of Natural Resources (MNR) of the Kurdistan Regional Government (KRG.) It contains a contextual overview of oil and gas deals between the Federal Government and the KRG, up to the December 2014 export and revenue sharing agreement, detailing the position of the Federal Government in relation to the Iraqi constitution and the Iraq-Turkey Pipeline treaty of (1973- 1976), which was updated in 2010.

Context of the December 2014 Export and Revenue Sharing Deal

6.3 In the absence of the governing law to determine a national energy strategy, as called for in Article 112, a series of short term agreements between the Federal Government and the KRG have been made between 2009 and November 2014.

6.4 These deals comprised different arrangements whereby the KRG exported an agreed number of barrels per day through the federal export system, in return for a share of the budget and, in some cases payments to IOCs for development costs. In each agreement, these exports were marketed by the Iraqi State Organization for the Marketing of Oil (SOMO), and in turn the KRG received a 17% share of oil revenues from the Federal Government, after various "sovereign expenses" are deducted.

The Federal Government Position in 2014

6.5 On May 23rd, 2014, a statement from the MNR announced that "A tanker loaded with over one million barrels of crude oil departed last night from Ceyhan towards Europe. This is the first of many such sales of oil exported through the newly constructed pipeline in the Kurdistan Region. The revenue from the sales will be deposited in a KRG-controlled account in Halkbank in Turkey."

6. Kurdistan Regional Government Extractive Industries (continued)

Overview of extractive industries in the Kurdish Region of Iraq in 2014

Disclosure

The Ministry of Natural Resources (MNR), Kurdistan Region, releases reports on its website in English and Kurdish. These may be at irregular intervals and with missing data or time periods. Relevant information for the period of this report (2014) and earlier years includes[1]:

- Monthly figures for production, refining, rig and well drilling counts, latest employment and production-sharing contract holders, for October 2013, November 2013, December 2013 and January 2014.
- Oil Production, Export, and Consumption Report 2003-2013, which covers oil in storage, monthly production (total), exports via trucking, exports via pipeline, and oil supplies to main domestic refineries and in topping plants (small-scale refineries).
- 2014 Account Statement[2], which lists receipts from local and export sales of crude oil, fuel oil and naphtha, loans taken and repaid, and other income, MNR operating costs, purchase of oil products, and funding of governorates and KRG ministries.
- Full texts of production-sharing contracts (PSCs) and amendments.
- Maps of assigned exploration blocks from 2013 (reproduced below).
- Kurdistan Oil & Gas Law[3].

Third-party information and studies are also available on the region's oil industry[4], as well as media reports, interviews with KRG officials and speeches and presentations on the region's hydrocarbon sector by the MNR and other officials at various conferences.

The available PSCs outline the KRG's fiscal terms quite clearly. There is some variation in the parameters but most of the PSCs are quite similar. They follow a fairly standard industry structure, comprising:

- Signature bonus, paid in cash.
- Royalty of 10% of gross revenues.
- Cost recovery from a fixed share (30-40%) of oil and gas revenues after royalty.

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[1] http://mnr.krg.org/index.php/en/oil/monthly-export-production-data

[2] http://mnr.krg.org/images/pdfs/MNR_Account_Statement_2014_1.pdf

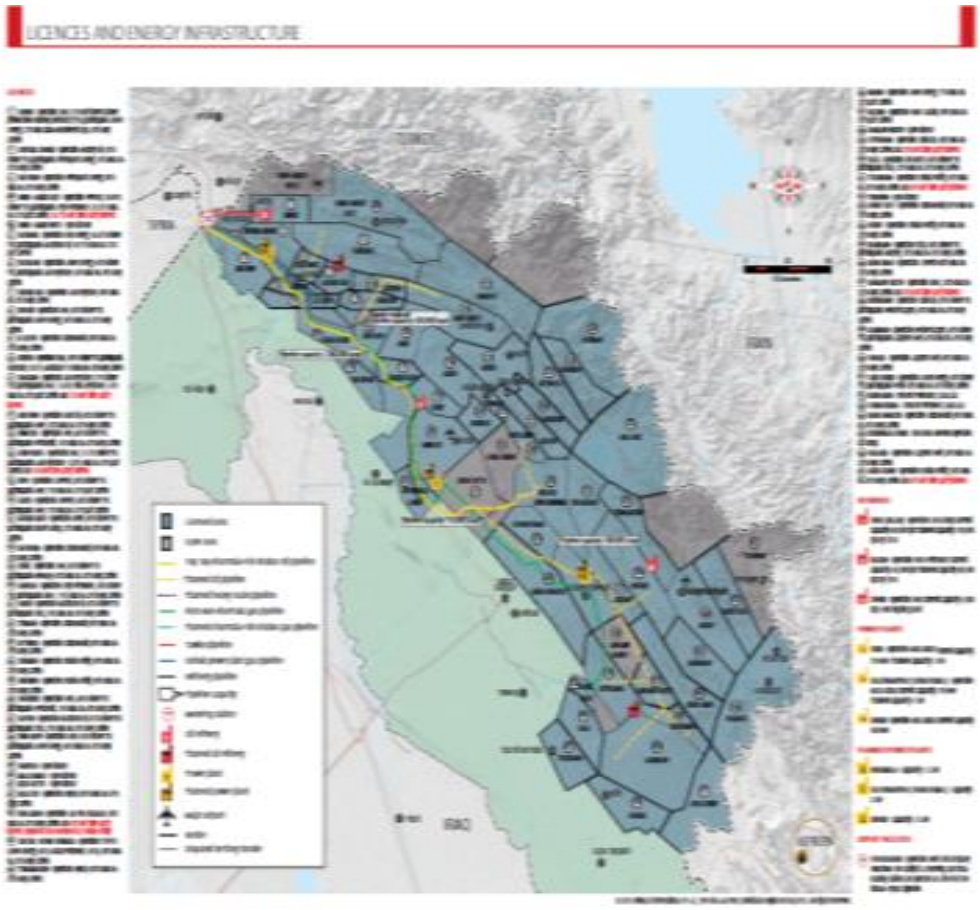
[3] http://mnr.krg.org/index.php/en/publications/56-krg-oil-gas-law

[4] e.g. 'Under the Mountains' (Mills, 2016), Oxford Institute for Energy Studies https://www.oxfordenergy.org/publications/under-the-mountains-kurdish-oil-and-regional-politics/

6. Kurdistan Regional Government Extractive Industries (continued)

- Profit share to the contractor of the revenues remaining after royalty and cost recovery, of 30% of profit reducing to 15% over time based on an 'R' factor (ratio of cumulative revenues to cumulative costs).
- 'Capacity-building payment', intended to be used to be used to develop the region's infrastructure, paid in cash or as a reduction in the contractor's profit oil share, typically by 30%.
- 20-25% 'carried' stake for the KRG, where it does not pay for exploration costs but has the option to take an interest in a commercial discovery.

Kurdistan Region's Oil & Gas Infrastructure Map[5]



6. Kurdistan Regional Government Extractive Industries (continued)

Oil

6.6 In late 2014, the MNR released a revised estimate of 60 billion barrels of Oil reserve, up from 45 billion, although the IEA notes that the 60 billion figure has not been independently verified. While the US Geological Survey estimated in 2000 that the Zagros Fold Belt (most of which lies in the KRI) had undiscovered potential resources of between 40 and 45 billion barrels. Prior to 2014, The MNR estimated recoverable reserves to be 11 billion barrels[6], meanwhile the Richmond Energy Partners estimated the recoverable Oil stood at a much lower 8 billion barrels, and the IEA put the KRI's proved recoverable reserves at 4 billion[7].

In November 2014, the KRG released the following statement on oil exports and revenues:

Since January 2014 to date, 34.5 million barrels (mmbbls) of oil have been exported from the Kurdistan Region, of which 21.5 mmbbls were sold through Ceyhan. The balance was trucked to Mersin in Turkey. The total value of the exported oil in cash or kind is $2.87 billion, of which $2.1 billion was received in cash and $775 million in kind for product swaps (710,000 metric tons of products consisting of kerosene, benzene and diesel). From the cash payments, some $400 million has been used to pay both trucking costs and as part payment to the oil producers. Hence, the net cash received by the KRG during this period is $1.7 billion. In addition, the KRG has also received a further $500 million in prepayment from committed purchasers of crude against future deliveries of oil piped to Ceyhan[8].

It will be noted that this implies a realized export price of about $83 per barrel. This compares to an average realized price for SOMO during January-November 2014 of $95.55 per barrel[9]. Without more detailed information, it is not possible to comment on reasons for this discrepancy, which could be related to factors including the timing of production, differing oil qualities and markets, and perceived risk to traders of buying KRI oil.

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6 http://www.resourcegovernance.org/sites/default/files/Iraq%20Myers_5.pdf

7 https://www.eia.gov/beta/international/analysis_includes/countries_long/Iraq/iraq.pdf

8 http://mnr.krg.org/index.php/en/press-releases/422-update-on-oil-export-from-the-kurdistan-region-of-iraq

9 Author's estimate from SOMO figures

6. Kurdistan Regional Government Extractive Industries (continued)

Kurdistan Region operational oil fields

6.7 The following is a list of operating oil fields in Kurdistan Region obtained from the Ministry of Natural Resources' website

1. Ain Sifni	11. Kurdamir	21. Sheikh Adi	31. Chia Surkh	41. Sarsang
2. Garmian	12. Sangaw South	22. Ber Bahr	32. Qush Tapa	42. Topkhana
3. Shaikan	13. Baranan	23. Pulkhana	33. TaqTaq	
4. Akri Bijeel	14. Mala Omar	24. Shorish	34. Dinarta	
5. Harir	15. Sarta	25. Bina Bawi	35. Rovi	
6. Shakrok	16. Barda Rash	26. QalaDze	36. Tawke	
7. Arbat	17. Miran	27. Sindi Amedi	37. Duhok	
8. Hawler	18. Shakal	28. Central Dohuk	38. Safen	
9. Sangaw North	19. Bazian	29. QaraDagh	39. Taza	
10. Atrush	20. Piramagrun	30. Sulevani	40. Erbil	

6.8 The following table outlines the oil and gas reserves of major fields in the Kurdistan Region[10]

Field	Oil[11] proved + probable reserves and contingent resources (million bbl)	Gas proved + probable reserves and contingent resources (trillion cubic feet)
Khurmala	2726	3.6[12]
Shaikan	1001	1.3
Atrush	854	0.1
Tawke	731	0.1
Taq Taq	579	0.1
Kurdamir	541	2.3
Sheikh Adi	531	0.4
Pulkhana	409	NA
Topkhana	55	1.7
Chemchemal	110	3.4
Khor Mor	138	4.4
Miran	34	3.5
Bina Bawi	45	4.9
Summail	0	1.4

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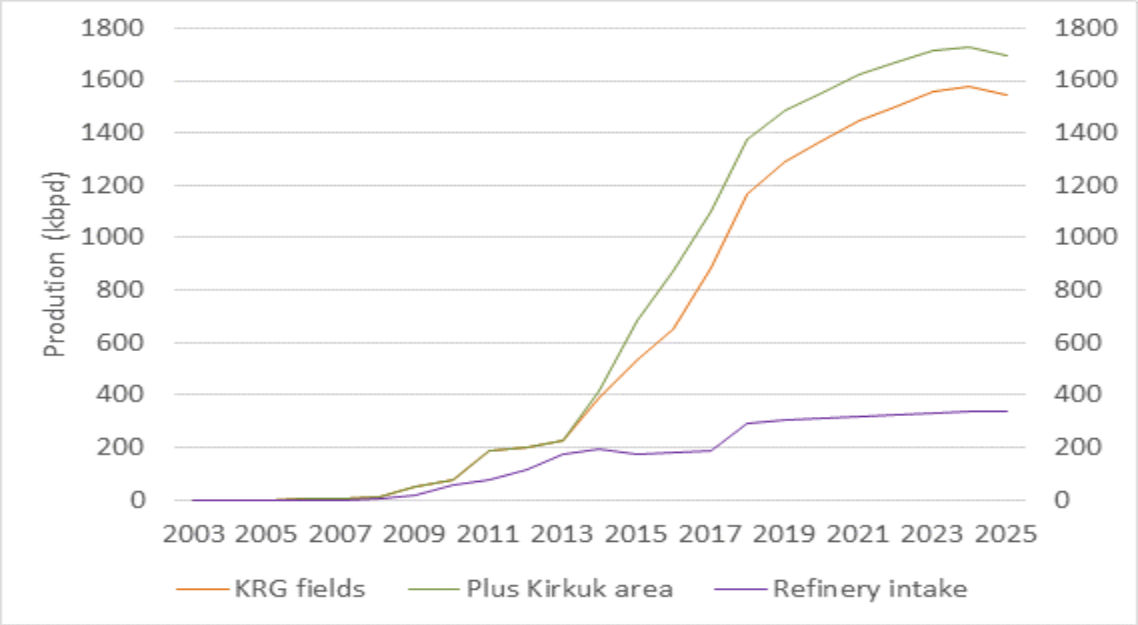
10 Research Data aggregated by Iraq Energy Institute
11 Includes condensate and natural gas liquids
12 Associated gas

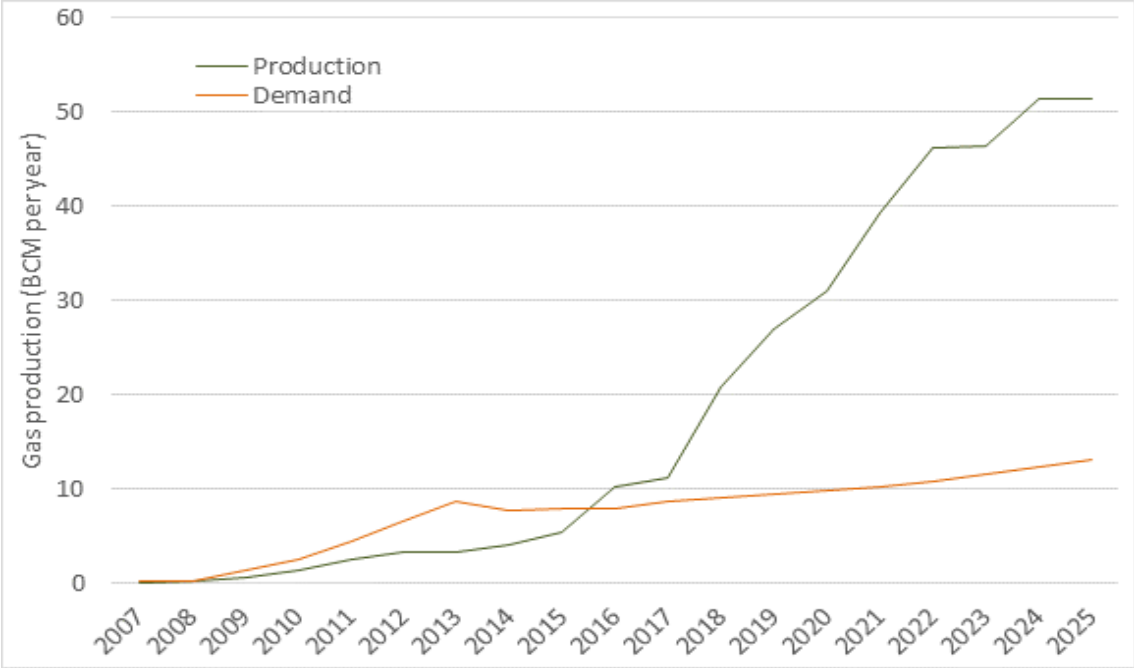
6. Kurdistan Regional Government Extractive Industries (continued)

Kurdistan Region's Oil & Gas: Production, Demand and Forecasts

6.9 The followings demonstrate Kurdistan Region's oil production[13]



6.10 The followings demonstrate Kurdistan Region's gas production and demand[14]



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13 MNR; company reports; Wood Mackenzie; Iraq Energy Institute estimates

14 Wood Mackenzie; Iraq Energy Institute estimates

6. Kurdistan Regional Government Extractive Industries (continued)

6.11 Since the MNR did not submit data for activity in gas fields within the KRI, with the exception of Khor Mor, the analysis below is based on MNR's average production for 11 fields in the KRI for 2014, and compared to one public source[15].

Field (Operator)	Production according to KRG (bbl/day)	March 2014 capacity (bbl/day)	End-2014 Capacity (bbl/day)
Khurmala (KAR Group)	100 000	110 000	150 000
Taq Taq (TTOPCO[16])	103 000	129 000	200 000
Tawke (DNO)	91 000	130 000	200 000
Khor Mor (Pearl Petroleum)[17]	26 000	15 500	15 500
Barda Rash (Afren)	10 000	3000	10 000
Shaikan (Gulf Keystone)	23 000	15 000	40 000
Akri-Bijeel (MOL)	10 000	3500	10 000
Bina Bawi (OMV)		3000	10 000
Miran (Genel Energy)[18]	1000	3000	3000
Garmian (Western Zagros)[19]	10 000	5000	10 000
Sarsang (HKN)[20]	10 000	0	10 000
Atrush (Taqa)		0	5000
Hawler (Oryx Petroleum)	4000	0	25 000
Kurdamir (Talisman)		0	5000
Total	**388 000**	**417 000**	**693 500**

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[15] International Oil Daily, March 2014. Several operators and capacity targets have changed subsequently
[16] 55% Genel Energy, 45% Sinopec (Addax Petroleum)
[17] Condensate
[18] Condensate
[19] Sarqala and Mil Qasim fields in MNR's report
[20] Swara Tika field in MNR's report

6. Kurdistan Regional Government Extractive Industries (continued)

- Khor Mor reported by MNR producing 26 000 bpd versus public capacity of 15 500 bpd. This could be due to the inclusion of LPG (as well as condensate)
- Taq Taq producing at 103 000 bpd according to MNR, compared to March 2014 capacity of 129 000 bpd and end-year planned capacity of 200 000 bpd
- Tawke producing at 91 000 bpd according to MNR, compared to March 2014 capacity of 130 000 bpd and end-year planned capacity of 200 000 bpd

Gas

6.12 Estimates of gas reserves are similarly variable. Prior to 2014, the MNR estimated 165 Tcf gas is in place, of which 38 Tcf is recoverable, although the MoO do not recognise this estimate, and recoverable gas reserves based on company estimates would only be a fraction of this estimate[21]. The MNR's website states "The Kurdistan Region could hold as much as 200 tcf (5.67 bcm) of natural gas reserves", though a large part of this must be undiscovered resource potential.

The MNR's reports do not appear to include figures for gas production, sales or revenues. The website only gives general information, saying:

"Our policy is to first satisfy domestic need for power and industrial uses, and then to export…We are already using gas for power generation and to help provide electricity to some of our neighbouring governorates, such as Ninevah and Kirkuk, and soon Salahaddin. The KRG has developed gas-fired power generation, with a current capacity of 3 GW and an additional 3 GW in the near future. Any excess gas will be directed towards developing local industries and the domestic gas network.

Later on, available gas will be exported to Turkey, the largest gas consumer in the region. The first export of gas is expected by 2016, providing a reliable source for Turkey. In addition, the Kurdistan Region is looking to Europe, which also needs a secure, reliable and diverse gas supply.

Our environmental policy puts tight restrictions on gas flaring. To ensure that all gas is used and flaring is kept to an absolute minimum, we are encouraging companies to make plans for gas utilisation."

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[21] http://belfercenter.ksg.harvard.edu/files/CES-pub-GeoGasIraq-111813.pdf

6. Kurdistan Regional Government Extractive Industries (continued)

Review of MNR average production data

Taq Taq

MNR Average 2014 production: 103,000 BPD

The only publicly available January estimate of production for Taq Taq was 40,000 BPD. [24]According to Genel Energy, this rose to an April average of 81,000 BPD. [25]By July Taq Taq's output was averaging 113,000 BPD. [26]According to Genel Energy, production at Taq Taq was not affected by the June 2014 ISIL offensive, with November seeing 126,000 BPD rising to 135,000 BPD in December with gross daily liftings of 147,000 BPD. The IEA estimated that Taq Taq had a production capacity of 130,000 BPD in December 2014[27].

Tawke

MNR Average 2014 Production: 91,000 BPD

On March 5th, 2014 DNO announced production at Tawke reached 129,000 BPD, [28] while Genel Energy announced an average of 57,000 BPD for Q1. DNO later announced May production at an average 120,021 for the month. [29] Genel Energy's average production for Tawke in June was 116,000 bpd. As with Taq Taq, the IEA estimated that Tawke had a production capacity of 130,000 BPD by December 2014. [30]

Khurmala Dome

MNR 2014 Average production estimate: 100,000 BPD

Khurmala Dome is one of three geological formations ("domes") that comprise the Kirkuk field. It was expected to have reached output of 100,000 BPD by the start of 2014, but had reached an estimated 80,000 BPD by January.[31] The field did however, see a surge in output to 100,000 BPD by November 2014, which was flowing into the KRG export pipeline.[32]According to the IEA, Khurmala Dome was producing 110,000 BPD by the end of 2014.This oil would have been a critical part of the November-December revenue sharing and export deals, because the field has had special status since 2008 when a deal between the Federal Government and the KRG put the field under KRG control. The KRG had asserted a constitutional right to the field as a "new" field; one interpretation of 112 of the Iraqi constitution would have subsequently granted the KRG the rights to develop and export oil from that field. The Federal Government countered this view by noting that the field was instead "existing" and had produced 35,000 b/d since August 2004. Prior to the 2008 deal, Khurmala Dome was the site of at least one confrontation between Peshmerga and Federal Government forces. [33]

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[28]http://inpublic.globenewswire.com/2014/03/17/DNO+International+Completes+Additional+High+Rate+Horizontal+Wells+in+the+Tawke+Field+HUG1769008.html

[29] http://www.bayphase.com/images/uploaded/pdf/Iraq%20Strategic%20Booklet.pdf

[30] https://www.eia.gov/beta/international/analysis.cfm?iso=IRQ

[31] http://www.oryxpetroleum.com/uploads/PDF/Kurdistan_Region_of_Iraq_Investors_Map.pdf

[32] http://www.iraqoilreport.com/news/kurdistan-exporting-oil-disputed-fields-13618/

[33] https://www.washingtoninstitute.org/uploads/Documents/pubs/PolicyFocus85v2.pdf

6. Kurdistan Regional Government Extractive Industries (continued)

Khor Mor

MNR 2014 Average production estimate: 26,000 BPD

Khor Mor supplies gas for power stations at Erbil and Bazian in the KRI, and has been a critical project for the KRG in terms of supplying electricity for municipal and industrial use. The field produces liquefied petroleum gas (LPG) and condensates, and although there is limited data available for 2014, condensate production was in the range of 20-25,000 BPD in 2013 and 2015.[34] By December 2014, combined gas production levels at Khor Mor and Chamchamal fields were reported at 9.5 million cubic meters per day.[35]

Barda Rash

MNR 2014 Average Production: 10,000 BPD

There is limited open source data available on Barda Rash; however a half year results statement from Afren in August 2014 reported 536 bpd gross production at Barda Rash.[36] In the same month, work at the field was disrupted due to the evacuation of non-essential staff following the June 2014 ISIL offensive.[37] At the time, Afren reported that around 6000 BPD production was planned, but the presence of large amounts of hydrogen sulphide forced production to be limited to 1000 BPD. A company statement in January 2015 noted that this technical challenge "would require significant capital expenditure to develop. In light of the above, the Company is now considering its strategic options for the Barda Rash field."[38]

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[34] http://www.thenational.ae/business/energy/kurdistan-regional-government-breaks-monthly-oil-export-record

[35] http://investingroup.org/review/185/forging-ahead-kurdistan/

[36] http://www.iraq-businessnews.com/2014/08/29/afren-announce-half-yearly-results/

[37] http://uk.reuters.com/article/iraq-security-afren-oilfield-idUKFWN0Q901J20140808

[38] http://www.afren.com/operations/kurdistan_region_of_iraq/barda_rash/

6. Kurdistan Regional Government Extractive Industries (continued)

Shaikan

MNR Average 2014 Production: 23,000 BPD

On the 9th of January 2014, Gulf Keystone announced that a cargo of 215,000 barrels of Shaikan crude was trucked to Turkey the previous December, which was to be later loaded at the port of Dortyol in Turkey, the equivalent of approximately 7100 BPD, which prompted the Federal Government to state that the exports were illegal. In June Gulf Keystone released figures for their wells suggesting two producing wells were averaging 21,000 BPD, while a third was planned to come on line, and another was producing a maximum of 3000 BPD, although no average was given.[39] A November 13th statement from Gulf Keystone noted production was averaging 23,000 BPD, matching the end of year average given by MNR[40]. The statement noted production was on track for 40,000 BPD by the end of 2014, a target which was achieved in December, according to an April 2015 report from Gulf Keystone.[41]

Sarqala and Mil Qasim

MNR 2014 Average Production: 10,000 BPD

Production at Sarqala was announced by Western Zagros in March 2014, following a period of test drilling, with an expected output of 10,000 BPD in the second half of 2014. [42] At the time of this announcement, one source put production for the Garmian Block, where these wells are located, as 5000 BPD. There is limited open source data on this field, however the MNR have submitted an average of 10,000 BPD for Sarqala and Mil Qasim, which is also part of the Garmian Block, in addition to the Hasira 1 well, which expected test results in December 2014. [43] In October 2014, Western Zagros released a statement that Sarqala 1 had reached 11,500 BPD.[44]

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[39] http://www.iraq-businessnews.com/2014/06/15/gulf-keystone-up-on-shaikan-update/

[40] http://www.oilvoice.com/n/Gulf-Keystone-provides-an-update-on-operations-at-Shaikan/9945ec8361fb.aspx

[41] http://www.gulfkeystone.com/media/89726/investor-presentation-april-2015.pdf

[42] http://www.iraq-businessnews.com/2014/03/14/westernzagros-to-start-production-at-sarqala/

[43] http://www.marketwired.com/press-release/westernzagros-provides-kurdamir-and-garmian-update-tsx-venture-wzr-1964064.htm

[44] http://www.westernzagros.com/ouroperations/operations/garmian-block/sarqala/

6. Kurdistan Regional Government Extractive Industries (continued)

Swara Tika

MNR 2014 Average Production: 10,000 BPD

A part of the Sarsang Block, there is limited open source data on Swara Tika, however flow rates were established at 7000 BPD from the test well at Swara Tika 1 in 2010. In December 2011, it was reported that the Swara Tika-2 well established natural flow totaling 18,000 bpd of in addition to 14 million standard cubic feet of associated gas.

In October 2013, a dispute over PSC terms between HKN and the MNR led to the cessation of operations at Sarsang, and according to one source production had still been halted as of March 2014. HKN started commercial production of the Swara Tika-1 well in June 2014, and announced in November 2015 that 1.5 million barrels had been produced from Swara Tika. [45] According to Maersk, Swara Tika was producing 3000 BPD in late 2015. [46]

Akri Bijeel

MNR 2014 Average Production: 10,000 BPD

Akri Bijeel came on stream in March 2014 and at the time one estimate put the capacity of the field at 5476 BPD from two wells, which was the announced production by MOL that month.[47] According to Wood Mackenzie, the field produced around 2000 BPD up until October 2014, when the field had an announced 10,000 BPD capacity.[48]

[45] http://www.energyglobal.com/upstream/drilling-and-production/16112015/HKN-receives-approval-of-Sarsang-Development-Plan-1743/

[46] http://www.energyglobal.com/upstream/drilling-and-production/16112015/HKN-receives-approval-of-Sarsang-Development-Plan-1743/

[47] http://www.energy-pedia.com/news/iraq/new-158525

[48] http://www.woodmac.com/reports/upstream-oil-and-gas-akri-bijeel-26358635

6. Kurdistan Regional Government Extractive Industries (continued)

Demir Dagh

MNR 2014 Average Production: 4000 BPD

Production at the Demir Dagh field began in June 2014, coming on stream with approximately 4,000 bbl/d output. [49] This stayed relatively steady until December 2014, as announced in Oryx's 2014 results, which reported 3,900 BPD for the actual days of production. [50]

Fields excluded from 2014 MNR data

A number of fields are excluded from 2014 MNR data, for example, Chia Surkh, Bina Bawi, Ain Al Safra, Bastora and Banan, which were all at the stage of testing/ appraisal in 2014. These fields are a part of approximately 40 fields that were under development in the KRI in 2014, as listed in this report. It would be useful for the MNR to submit data for these fields, since test wells (as noted in some examples above) can produce significant amounts of oil, and the cumulative output from appraisal wells in these fields could be substantial.

For 2014 data must be also be submitted for fields under the control of the Kurdish Peshmerga forces following the retreat of Federal Government forces during the 2014 ISIL offensive. These fields are Kirkuk, Bai Hassan, Khabbaz and Jambur, and the smaller field of Ain Zalah. Not long after the first ISIL offensive, the KRG began construction of a pipeline to connect Avanah Dome of the Kirkuk field to Khurmala, allowing more oil to flow into the Kurdish export pipeline. This oil is estimated to be in excess of 150,000 BPD. In November 2014, it was reported that Ain Zalah field, also formerly controlled by the Federal North Oil Company and supposedly producing 2000 BPD, (with a 10,000 BPD capacity) was being linked by pipeline into the Kurdish export system. Some reports indicate that the Butmah and Sufaiya fields were later secured by Kurdish forces, following an August ISIL offensive. These are both small fields but reportedly capable of producing 5000 BPD.

Therefore, the amounts of oil extracted by the KRG between the June 2014 ISIL offensive and the export and revenue sharing deal in December of that year, in addition to oil from numerous test wells within the KRI, represents a significant omission. Furthermore, it is unclear why the MNR listed average production at Barda Rash as 10,000 BPD, when Afren who were developing the field listed production at no more than 1000 BPD.

[49] http://www.oryxpetroleum.com/en/investors-media/latest-news.php?pages=1&idnews=44

[50] http://www.oryxpetroleum.com/data/financial/Year_End_2014_Annual_Financial_Statements_Press_Release.pdf

6. Kurdistan Regional Government Extractive Industries (continued)

Revenues

Total production in the KRI in 2014 is stated to be 114 090 336 barrels[51], an average of 312 576 barrels per day. Trucked exports were 12 622 744 barrels (34 583 barrels per day) and pipeline exports were 36 856 087 barrels (100 976 barrels per day). 36 387 099 barrels were supplied to main refineries (99 691 barrels per day) and 28 328 041 barrels (77 611 barrels per day) were supplied to the local market.

The MNR's account statement indicates $255 894 802 received from local sales of the government's share of crude oil (a breakdown is given between Taq Taq, Tawke and Khurmala). $2 618 964 841 was received from export sales of oil by pipeline and trucking, of which a large part ($2 366 516 267) was pre-payments against future deliveries of oil. $443 091 008 was received as pre-payments for fuel oil and naphtha to be delivered to industrial and power users (broken down between the six companies named).

$2 040 799 444 was received as loans or cash advances from various companies, and $24 000 000 as a repayment of a loan to Mass Global.

$2 018 544 412 was received as 'other income', of which the largest part relates to the sale of oil products ($1 655 865 979) and PSC bonus income ($242 171 728).

These figures reconcile with the total reported revenue ($7 401 294 506).

On costs, $1 181 904 394 was paid as operating costs, with the largest parts reflecting the oil processing fee paid to refiners ($457 621 366) and the payment to the Khurmala contractor ($524 700 667), presumably under the applicable service contract.

$1 065 734 473 was paid in reimbursement of cash advances. It can be observed that this appears to pay off entirely the amount due to KAR Group, about two-thirds of that due to UB Holding, and about half of that due to Farook Group and Sarmyan. The amount paid to KIB (LR) of $261 268 473 is more than the reported 2014 cash advance of $192 500 000 (it is stated this relates to a cash advance made in 2013). There is no indication of any repayment of the $500 000 000 loan from the Turkish Energy Company or the $400 000 000 cash advance from Qaiwan.

[51] http://mnr.krg.org/images/pdfs/Production_Report_2014_WEB.pdf

6. Kurdistan Regional Government Extractive Industries (continued)

$888 055 439 relates to buying of oil products (which are not specified further).

$29 338 798 was spent on governorate projects and $2 881 906 833 on funding KRG ministries. $8 790 519 relates to miscellaneous items and -$9 027 873 to currency corrections.

These figures for costs reconcile to the reported total.

A full reconciliation of production figures and revenues has not been performed under the scope of this study. However, some observations can be made:

- The 2014 Account Statement is not presented in standard accounting format and there is no indication of an auditor;
- Calculations are not presented for key items, e.g. the volume and pricing of crude oil sales, the government share of production from Taq Taq, Tawke or Khurmala, or oil product purchases. This makes it hard to reconcile the financial figures with the volumetric figures in the 'Oil Production, Export, and Consumption Report 2014'. For example, 12.623 million barrels were exported by truck, but it is not clear how this relates to the $460 million received for "Pre-payment for exports via trucking" plus $252 million for "Export sales via trucking", as it is not clear how much of the delivered oil counted against the pre-payment. The same is true for the pipeline sales, although this could possibly be determined by more analysis of the 'Account Payables' section of the report.
- The interest rates, tenors and other terms of various loans taken are not disclosed.
- Under 'MNR Payables', it is specifically stated 'This does not include money owed to contractors for their share of oil sales', and this amount is not reported. DNO reported that its receivables at the end of 2014 were $184.4 million[52], most of which can be assumed to relate to the KRI; Dana Gas's receivables were $746 million at the end of 2014[53] (and its partner Crescent Petroleum, with an equal share, presumably had a similar receivables balance); Genel Energy's receivables at the end of 2014 were $230 million[54]; and Gulf Keystone had trade receivables at the end of 2014 of $4.9 million[55]. Other companies which do not report public results presumably also had substantial receivables balances.

[52] http://www.dno.no/globalassets/reports-and-presentations/documents/dno-asa-annual-report-2014.pdf

[53]http://www.danagas.com/en/pressrelease/media-center/press-releases/dana-gas-2014-annual-revenue-grows-to-us-683-million-aed-25-billion.html

[54] http://www.genelenergy.com/media/1198/genel_-_trading_update_-_210115_final.pdf

[55] http://www.gulfkeystone.com/media/89733/GKP_AR14.pdf

6. Kurdistan Regional Government Extractive Industries (continued)

MNR's Account Statement: 1st January 2014 – 31st December 2014[56]

2014 START BALANCE (USD)		**920,221,641**
RECEIPTS 2014		**USD**
LOCAL SALES OF CRUDE OIL	GOVERNMENT SHARE OF TAQ TAQ SALES	215,000,000
LOCAL SALES OF CRUDE OIL	GOVERNMENT SHARE OF TAWKE SALES	33,701,565
LOCAL SALES OF CRUDE OIL	GOVERNMENT SHARE OF KHURMALA SALES	7,193,237
TOTAL LOCAL SALES OF CRUDE OIL		**255,894,802**
CRUDE OIL EXPORTS	PRE-PAYMENT FOR EXPORTS VIA PIPELINE	1,906,166,267
CRUDE OIL EXPORTS	PRE-PAYMENT FOR EXPORTS VIA TRUCKING	460,350,000
CRUDE OIL EXPORTS	EXPORT SALES VIA TRUCKING	252,448,574
TOTAL CRUDE OIL EXPORTS		**2,618,964,841**
FUEL OIL PRE-PAYMENT	FAROOK HOLDING	50,967,096
FUEL OIL PRE-PAYMENT	LANAZ	28,170,000
FUEL OIL PRE-PAYMENT	ERBIL STEEL COMPANY	3,523,200
FUEL OIL PRE-PAYMENT	QAIWAN	305,200,000
FUEL OIL PRE-PAYMENT	MASS GLOBAL	53,215,000
FUEL OIL & NAPHTHA PRE-PAYMENT	GK STEEL	2,015,712
TOTAL FUEL OIL & NAPHTHA PRE-PAYMENTS		**443,091,008**
LOAN	TURKISH ENERGY COMPANY	500,000,000
CASH ADVANCE	KIB [1]	192,500,000
CASH ADVANCE	KAR GROUP [2]	650,299,333
CASH ADVANCE	FAROOK HOLDING	100,153,000
CASH ADVANCE	QAIWAN	400,000,000
CASH ADVANCE	SARMYAN	128,847,110
CASH ADVANCE	UB HOLDING [3]	69,000,000
TOTAL LOANS		**2,040,799,444**
LOAN REPAYMENT	RECEIVED FROM MASS GLOBAL	24,000,000
TOTAL LOAN REPAYMENTS		**24,000,000**
SELLING OF PRODUCTS	MIXED	1,655,865,979
MINISTRY OF NATURAL RESOURCES	PSC BONUS INCOME	242,171,728
OPF	OPF SERVICES	78,016,577
OTHER INCOME	TRUCKING TOLL	26,106,096
BANK INTEREST	INTEREST	350,000
MINISTRY OF NATURAL RESOURCES	VARIOUS REFUNDS	14,486,043
MINISTRY OF NATURAL RESOURCES	MISCELLANEOUS	1,547,989
OTHER INCOME		**2,018,544,412**
TOTAL RECEIPTS 2014		**7,401,294,506**
BALANCE CARRIED FORWARD		**8,321,516,147**

[56] http://mnr.krg.org/images/pdfs/MNR_Account_Statement_2014_1.pdf

6. Kurdistan Regional Government Extractive Industries (continued)

(1) Short-term injection of liquidity (cash advances) balanced by repayments

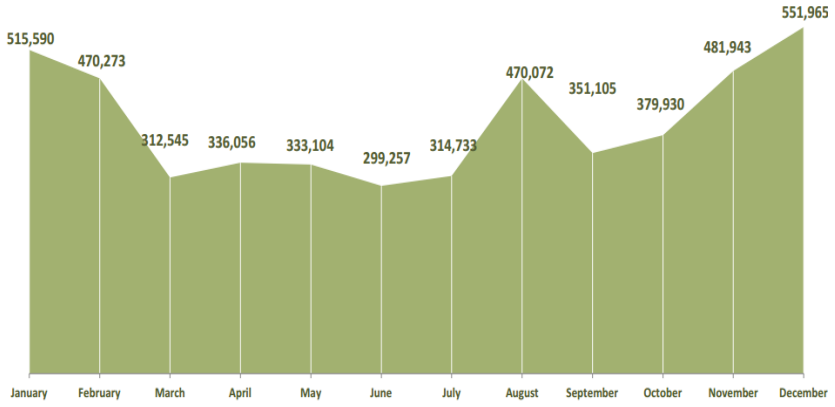
(2) Cash advance paid to MNR against cheques issued to Kar Group by MNR to solve MNR liquidity issues.

(3) In addition, UB Holding also loaned 82,916,543 USD to the MNR, which was collected directly by PowerTrans for the purchase of fuel products.

MNR's Oil Production 2014, Export, and Consumption [57]

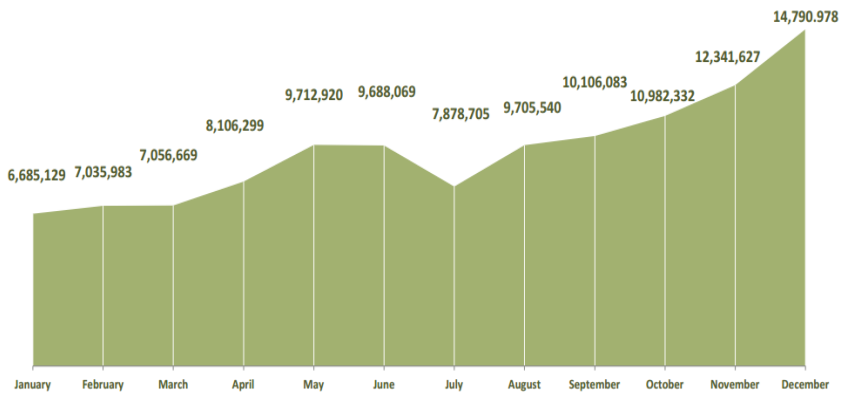
Start Tank & Production 2014

Month	Start Tank (bbls)
January	515,590
February	470,273
March	312,545
April	336,056
May	333,104
June	299,257
July	314,733
August	470,072
September	351,105
October	379,930
November	481,943
December	551,965



Beginning Start Tank: Measured in Barrels of Oil Equivelant (BOE), the beginning start tank refers to the quantity in storage at the beginning of the month.

Month	Monthly Production (bbls)
January	6,685,129
February	7,035,983
March	7,056,669
April	8,106,299
May	9,712,920
June	9,688,069
July	7,878,705
August	9,705,540
September	10,106,083
October	10,982,332
November	12,341,627
December	14,790,978
Total	**114,090,336**



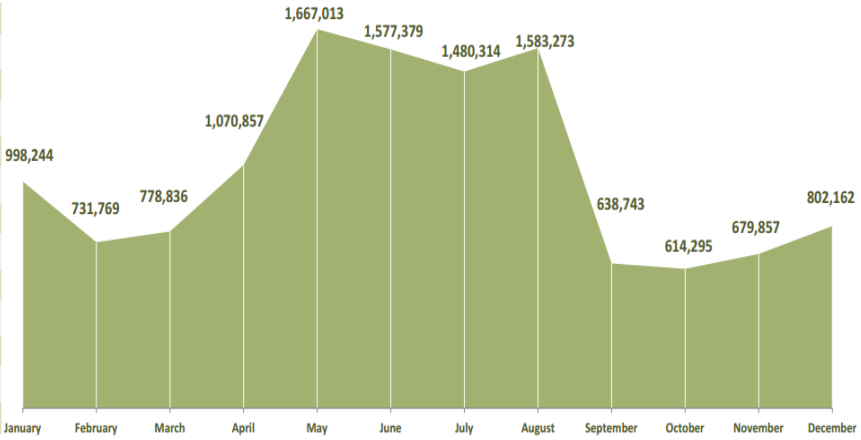
Gross Production: Measured in Barrels of Oil Equivalent (BOE), the Gross Production refers to the quantity of oil and gas produced by IOCs operating assets belonging to the KRG.

[57] http://mnr.krg.org/images/pdfs/Production_Report_2014_WEB.pdf

6. Kurdistan Regional Government Extractive Industries (continued)

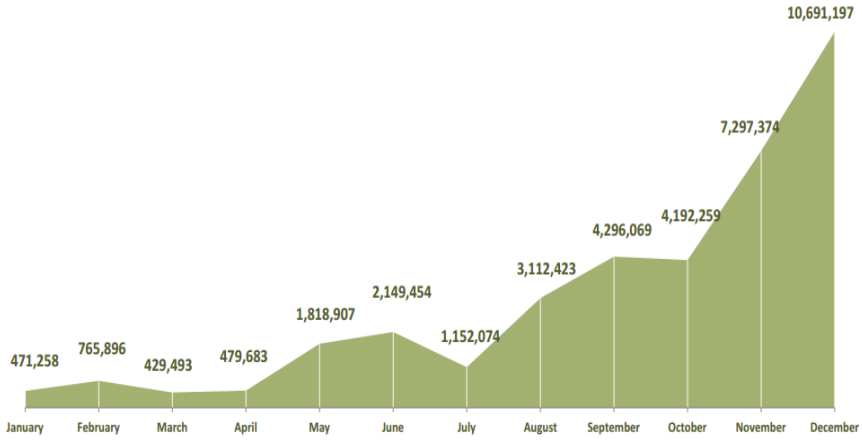
Exports via Trucking & Exports via the KRG Pipeline 2014

Month	Exports via Trucking (bbls)
January	998,244
February	731,769
March	778,836
April	1,070,857
May	1,667,013
June	1,577,379
July	1,480,314
August	1,583,273
September	638,743
October	614,295
November	679,857
December	802,162
Total	**12,622,744**



Exports via Trucking: Measured in Barrels of Oil Equivalent (BOE), Export via Trucking refers to oil exports out of the Kurdistan Region through trucks, under the current crude oil for products swaps arrangement through Turkey.

Month	Exports via KRG Pipeline (bbls)
January	471,258
February	765,896
March	429,493
April	479,683
May	1,818,907
June	2,149,454
July	1,152,074
August	3,112,423
September	4,296,069
October	4,192,259
November	7,297,374
December	10,691,197
Total	**36,856,087**

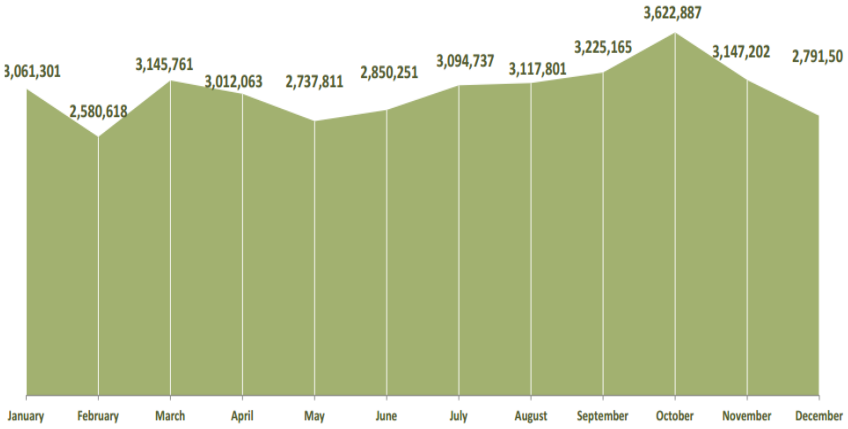


Exports via KRG Pipeline: Measured in Barrels of Oil Equivalent (BOE), Export via KRG Pipeline refers to exports through the KRG-owned pipeline to Turkey.

6. Kurdistan Regional Government Extractive Industries (continued)

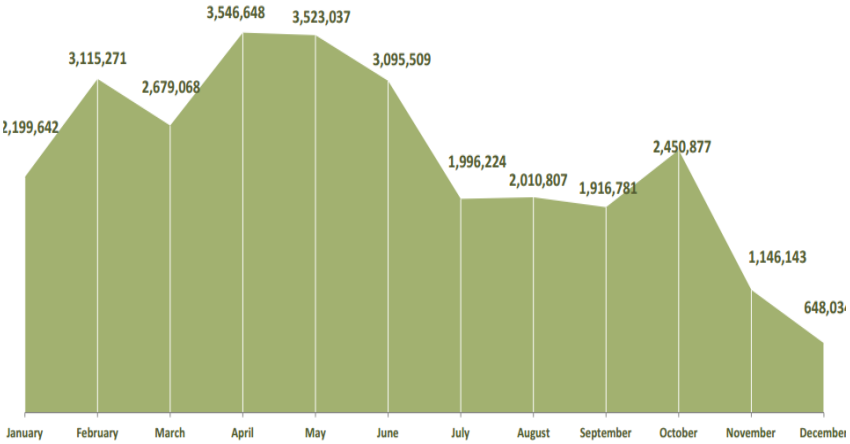
Supplied to Refineries & Local Consumption 2014

Month	Supplied to Main Refineries (bbls)
January	3,061,301
February	2,580,618
March	3,145,761
April	3,012,063
May	2,737,811
June	2,850,251
July	3,094,737
August	3,117,801
September	3,225,165
October	3,622,887
November	3,147,202
December	2,791,502
Total	**36,387,099**



Supplied to Main Refineries: Measured in Barrels of Oil Equivalent (BOE), Supplied to Main Refineries refers to the quantity of oil and gas supplied to the MNR monitored refineries; Kalak (operated by Kar Group), Bazian (operated by Bezhan Pet) and Tawke (operated by DNO). Almost all of the refined products from the main refineries are consumed locally, except for Naphtha and Fuel Oil which are sometimes exported through Iran to the international market.

Month	Local Consumption (bbls)
January	2,199,642
February	3,115,271
March	2,679,068
April	3,546,648
May	3,523,037
June	3,095,509
July	1,996,224
August	2,010,807
September	1,916,781
October	2,450,877
November	1,146,143
December	648,034
Total	**28,328,041**



Local Consumption: Measured in Barrels of Oil Equivalent (BOE), Local Consumption refers to the quantity of oil and gas sold domestically to local buyers. Locally purchased crude oil is processed in country at Topping Plants, and the majority of the refined products are consumed locally (except for Naphtha and Fuel Oil which are sometimes exported through Iran).

6. Kurdistan Regional Government Extractive Industries (continued)

Mining and Minerals in the KRI

According to a June 2014 statement on the website of the Australian Institute of Geoscientists, the KRI (Zagros Suture Zone) is 140 km long by 20 km wide along the border with Turkey and the eastern part along the Iranian border. This area has been identified as having metallic deposits such as strata-bound zinc and lead, copper, Cyprus-style massive sulphide in the ophiolite belt, basic and ultra-basic chromium and nickel, iron, manganese (contact metamorphic), and barite. [58]

As of 2014, the KRG was still in the process of drafting a mining law to generate interest in the mining sector to be ratified by the Kurdistan parliament. There has been no official statement on Mining and Minerals from the MNR in 2014 and no data was submitted for this report. The MNR's website gives only very limited information on mining[59]. There is no indication, either from the MNR or from public sources, that any large-scale mining activities are underway or that the KRG has received any revenues from mining.

[58] https://www.aig.org.au/events/mineral-potential-of-iraq/

[59] http://mnr.krg.org/index.php/en/mining/mining-vision

Lessons learned from this reconciliation

7

7. Lessons learned from this reconciliation

Progress on recommendations implementation from previous lessons

a) Improving materiality percentage from 1% to 0.5% which reflects a decrease from 710 Million to 355 Million dollars on this report.
b) Engaging with PwC was made in a early stage, which allowed more time to perform the reconciliation tasks and obtain variance justifications.
c) On the contary of previous years, all companies were obliged to furnsch their data in accordance with the reporting templates which made the reconciliation process easier.
d) There were serious attempts in applying International Accounting Standards such as the efforts of the Federal Board of Supreme Audit in enforcing the Standards.

Irrespective of how much planning has been carried out, there is always room for improvement and lessons learned from each reconciliation conducted. Experiences from the initial implementation of the EITI in Iraq are summarised below, noting that most of them are recurring from previous years

7.1 Materiality

The materiality threshold was set by the Stakeholder Council at 0.5%. Although the materiality threshold was defined, explanations were sought for all differences.

Recommendation:

Adherence to the materiality threshold being a percentage of the caption reviewed and setting a fixed threshold amount below which further review/explanations are not sought.

7.2 Reporting deadlines

Although there was an improvement in issuing reports deadlines, Stakeholers' Council is requested to issue the final report during a preiod of one year from the year end.

Recommendation:

It is recommended that the IEITI Stakeholders' Council engages with the independent administrator at an early stage of the year in order to provide the administrator with enough time to perform the reconciliation tasks and to issue 2015 report.

7.3 Quality of reporting templates

Current report has indicated an improvement in the quality and cotent of the reporting templates. However, the upcomoing reports need to be changed and improved to better manage the changes in the Terms of references.

Recommendation:

It is reccommended that the Stakeholders Council coordiante a work-shop that includes experts from extraction sector from both Ministry of Industries and Menerals and Minisrty of Oil to develop those reporting templates.

6. Lessons learned from this reconciliation (Continued)

7.4 Signatures

Based on the guidelines, the reporting templates should be signed by the related personnel at the reporting entity.It had been noted that some of the templates were not signed,however the forms were received through the official emails of thereported entities.

Recommendation:

Future guidelines need to emphasise on the importance signing off the submitted templates.

7.5 Auditor's report

Buyers were requested to submit the auditor's report along with completed templates. Some companies failed to submit the audited reports along with the templates where the reconciler had sent reminders in this regard. Due to the current regulatory context in Iraqand the structure of the oil and gas industry,national oil companies are audited by the Iraqi Board of Supreme Audit (BSA) based on local Iraqi accounting standards. These Iraqi standards, when originally developed in the 1980's, were based on International Accounting Standards (IAS). However, these standards were not updated consistently in accordance with the International Accounting Standards. Accordingly they will create an understanding gap between national oil companies as compraed with the industry practice.

Recommendation:

It is recommended that buyers provide its audited financial statements to SOMO annually. Moreover, National Oil Companies should be audited in accordance with International Accounting Standards and International Financial Reporting Standards.

7.6 Ministry of Electricty data

Although the electricty sector is considered as a major local consumer, consumption data related to this sector needs more improvements and auditing to include detailed amounts and quantities.

Recommendation:

It is recommended to request from Ministry of Oil and Ministry of Electricity to provide all requested data, where workshops may be needed to increase the awareness of the reconciliation process for the related staff.

7.7 Authorisation

Difficulties occurredduring obtaining the data from concerned parties due to bureaucracy or lack of authorisation, which delay data collection efforts.

Recommendation:

It is recommended that appropriate management level at each entity to authorise full access of data for IEITI team at early stages to avoid delays and miscommunications in this regard.

Annex 1 - List of reporting entities

Local Consumption and Ministries

No.	Entity
1	Ministry of Finance
2	Ministry of Industries and Minerals
3	Ministry of Planning
4	Ministry of Electricity
5	SOMO
6	North Oil Company
7	South Oil Company
8	Missan Oil Company
9	Midland Oil Company
10	North Refinery Company
11	Mid Refinery Company
12	South Refinery Company
13	North Gas Company
14	South Gas Company
15	Basrah Gas Company
16	Oil Products Distribution Company
17	Oil Pipeline Company
18	Gas Filling Company

SOMO Buyers

No.	Buyer
1	APIOIL UK LIMITED
2	Bharat Oman Refineries Limited
3	Bharat Petroleum Corporation LTD.
4	BP OIL INTERNATIONAL LIMITED
5	CEPSA TRADING SAU
6	Chevron Products Co. A Division Of Chevron U.S.A. Inc.
7	China National United Oil Corporation
8	China Offshore Oil (Singapore) International Pte Ltd
9	China ZhenHua Oil Co.Ltd.- Main/ (North Petroleum)
10	ENI Trading & Shipping SPA

Annex 1 - List of reporting entities

SOMO Buyers (Continued)

No.	Buyer
11	ERG Supply &Trading S.P.A
12	ExxonmobilSales and Supply LLC. U.S.A
13	GS Caltex Corporation
14	GUNVOR SA
15	Hindustan Petroleum Corporation Ltd. - India
16	HPCL-Mittal Energy Limited
17	Indian Oil Corporation Limited – India
18	IPLOM INTERNATIONAL SA
19	JX Nippon Oil & Energy Corporation
20	Koch Supply & Trading, LP
21	LITASCO MIDDLE EAST DMCC
22	MOTOR OIL HELLAS CORINTH REFINERIES S.A
23	Pertamina Energy Services Pte Ltd
24	PETCO Trading Labuan Company Limited (PTLCL) / Petronas
25	Petro Diamond Company limited / Care of Mitsubishi Corporation
26	Petrobras Global Trading B.V.
27	PETROGAL S.A.
28	Phillips 66 International Trading Pte. Ltd.
29	REPSOL TRADING, S.A.
30	SARAS S.P.A.
31	SHELL INTERNATIONAL EASTERN TRADING COMPANY
32	Sinochem International Oil (London) Co. LTD
33	SK Energy Co., Ltd.
34	SOCAR TRADING SA
35	TOTSA TOTAL OIL TRADING SA
36	Toyota Tsusho Corporation
37	TURKISH PETROLEUM REFINERIES CORP.(TUPRAS)
38	UnipecAsia Co. Ltd. / China International -Main
39	Valero Marketing & Supply Co.
40	VITOL REFINING SA

Annex 1 - List of reporting entities

International Oil Companies

No.	Company
1	BP
2	Petrochina
3	Shell West Qurna B.V / Shell Iraq Petroleum B.V
4	Petronas
5	Japex
6	Eni
7	Occidental
8	Kogas
9	ExxonMobil
10	Sonangol
11	Total
12	Gasprom
13	Tpao
14	OJSC Lukoil
15	CNOOCI
16	Kuwait Energy Co.
17	Pakistan Petroleum Ltd
18	Dragon Oil Holding Ltd
19	Lukoil overseas exploration Iraq
20	Inpex Corp.
21	JsocBashneft
22	Premier Oil Pic

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2014

pwc

April
2016

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Cover Design: Methaq Al-azzawi
Painting: Esraa M. Redha