The Forthcoming Exploration Blocks Bid Round In Iraq: Issues For Consideration

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Introduction And Background

The Ministry of Oil deferred the holding of the exploration blocks bid round, a fourth bid round in a row, from November 2011 to January 2012. The event would offer 12 exploration blocks for competition among qualified international oil companies (IOCs). Seven blocks are gas prone and the rest have oil potential.

The areas of the new offered blocks are large in comparison with the previously demarked blocks, and six are border areas. Why this enlargement and what are the implications for the corresponding powers of provinces and central authorities, and for the priority of border fields within Iraq's national petroleum policy, are examples of many questions raised throughout the paper.

The ministry ought to decide the nature and scope of contracts that would govern the resulting exploration projects, but what are the options available?

Politically, the parliament exhibits determination to have an effective role in this matter, and asked the ministry to put on hold the bid round, but the ministry refused the request. Hence a new round of tension among the main political powers, camouflaged by these executive-legislative differences, might add further strain to an already shaky alliance.

This paper aims at focusing on and highlighting the main issues pertaining to the bid round, analysing them, suggesting options for consideration, and hopefully making a positive contribution to the national debate on this particular issue.

National Exploration Program And Its Investment Allocation

The Ministry of Oil announced in February 2011 a new four-year plan covering the period 2011-14. The first objective of the plan is "to attain significant increase in the oil and gas reserves" over Iraq's officially confirmed proven reserves of 143bn barrels of oil and 127 trillion cu ft of gas (circa 35 tcf of free gas and 92 tcf of associated gas.) Sources at the ministry quantify these objectives to adding around 29 tcf of gas and 10bn barrels of oil to offset the expected depletion of fields that would be developed by international oil firms, offered in the last three bidding rounds. [1]

Investment allocations for the exploration program under the plan amounts to ID751.52bn [2] earmarked as follows: ID140bn for 2011, ID168bn for 2012, ID201.6bn for 2013 and ID241.92bn for 2014. [3] Though the annual investment allocation for the exploration program is on an upward trend, the proportion to total plan investment allocation remains constant at 3.73% on both the aggregate and annual levels. This would lead me to suggest that the investment allocation for the exploration program was formulated more on a sheer fiscal measure basis, being a fixed percentage of the plan's total investment allocation, than on specified cost-itemized exploration activities.

The plan says that this investment allocation does not cover payments due to IOCs for the three bid rounds, and thus I take it do not cover also the annual financial requirements of the contracts that would be concluded pursuant to the forthcoming exploration bid rounds if they are awarded within the duration of the plan.

The exploration program, according to the minister of oil, would be implemented in three phases: the first phase is to hold the bidding round for the 12 exploration blocks; the second to launch massive exploration operations throughout the country using national efforts and capacities; and the third is to drill 12 exploration wells (in other areas) across Iraq. [4] The plan and available information are not clear whether these three phases would be executed concurrently or consecutively. More precisely is it possible to de-link phase one from the other two phases or change the order of phases?

Timeline: From Pre-Qualification To Licensing

The bid round was originally scheduled for November 2011, but the time was too soon to go through all the necessary steps for holding the event. Accordingly a new date was announced – January 2012.

In a nutshell the ministry adopted in April the following timeline, amended once so far:

- 19 May was the deadline for interested companies to submit documents for pre-qualification, and the pre-qualified companies would be known on 30 June. However, one day before the initial deadline expired the Ministry of Oil extended the deadline to 6 June. Obviously, this extension is bound to affect the remaining milestones of the timeline.
- On 24 August the ministry will release the initial tender protocol, draft contract and data packages. Before August ends the road show (first workshop) to sell data packages to companies will kick off.
- On 1-3 November a contract/technical workshop will be held with companies that bought the data packages.
- The ministry aims to publish the final tender protocol and contracts in mid-December, and the bidding event will be on 25-26 January 2012.

To finalize the pre-qualification process, the Petroleum Contracts and Licensing Directorate (PCLD) of the ministry launched on 14 April the third pre-qualification process for the IOCs with a view to:

1. Qualifying IOCs that were not qualified for the previous three licensing rounds.
2. Re-evaluating the previously qualified IOCs that have not signed service contracts with the ministry's companies in the previous rounds. The re-evaluation focuses on the "Legal and Financial Criteria" of the pre-qualification process.

IOCs in Category 1 are requested to fill all the requested information as per prepared sheets, whereas those in Category 2 are to fill the legal and financial information sheets only, supported by specific official documents for the past three years. A non-recoverable "qualification fee" of ID18mn was to be paid in cash by each IOC in the two categories well before the deadline. The documents receiving deadline was 19 May. [5] Though the call for pre-qualification went out on 14 April, "no firms have submitted documents to prequalify for the auction of 12 new oil and gas blocks" as of 28 April, according to 'Abd al-Mahdi al-'Amidi, Director General of PCLD. [6]

Was the Ministry of Oil decision to extend the deadline to 6 June due to requests from interested IOCs, as the ministry says, or due to a discouraging response from oil companies or due to the recent difficulties with the parliament regarding the timing of the bid round, as will be discussed later on?

There is no question in my mind that IOCs (big or small) will show keen interest, and probably compete ferociously, for these blocks or some of them. Some IOCs will be driven by enhancing their existing position, while others attempts to seek foothold in the Iraqi upstream petroleum. I would expect more new companies to show interest in these exploration blocks. I also expect the blacklisting practice of companies already working with the Kurdistan Regional Government (KRG) to remain active, since the federal government still considers oil contracts with KRG illegal.

But the real question is does Iraq need and could it effectively manage yet another big-push undertaking in the upstream petroleum sector?

Remarks On The Offered Exploration Blocks

Initially, the Ministry of Oil announced that 12 exploration blocks, including one offshore (previously designated as Block 18), would be offered for the competitive bidding round. This was mentioned in the ministry's plan described above and confirmed by the oil minister, though the numbers, sizes and locations of the 12 blocks were not specified until late April 2011. [7]

According to a previously prepared map, the ministry identified 54 exploration blocks located on different parts of the country and they were classified according to five categories according to their hydrocarbon potentials, as summarized in Table 1.

Table 1: Old Demarcated Exploration Blocks

Hydrocarbon Potential and Number of Blocks	Blocks Numbers
High Oil (22)	18, 19, 20-38, 39
High Gas (9)	3-7, 10-13
High Oil and Gas (4)	1, 2, 8, 9
Moderate Oil (10)	40-49
Moderate Oil and Gas (9)	14-17, 50-54

Source: Author, based on Ministry of Oil maps.

After consideration by the Ministry of Oil and approval by the Council of Ministers (COM) a new map was released containing 12 new exploration blocks. Table 2 summarizes the location, size and likely type of hydrocarbon of the offered exploration blocks.

Locations Of Iraq's New Exploration Blocks

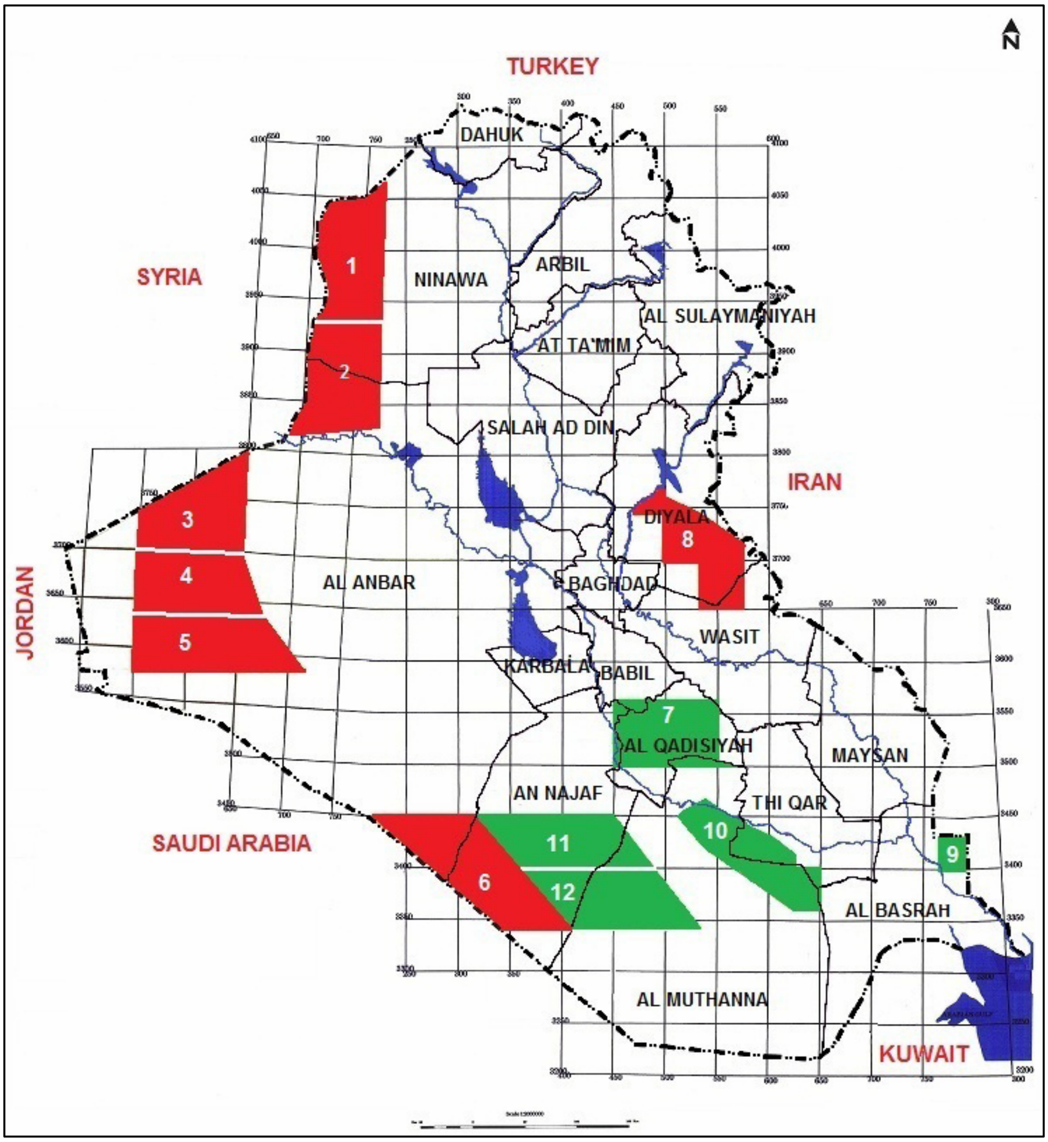

Table 2: The New Exploration Blocks

Block No.	Governorate / Province	Area (sq km) Gas	Oil
1	Nainawa	7,300	
2	Nainawa and Anbar	8,000	
3	Anbar	7,000	
4	Anbar	7,000	
5	Anbar	8,000	
6	Anbar and Najaf	9,000	
7	Anbar, Babil, Najaf, Muthanna, Wasit		6,000
8	Diyala and Wasit	6,000	
9	Basrah		900
10	Muthanna and Thiqar		5,500
11	Najaf and Muthanna		8,000
12	Najaf and Muthanna		8,000
Total		**52,300**	**28,400**
Percentage of Areas' Grand Total		**65%**	**35%**
Areas Grand Total (km^2)		**80,700**	

Source: Ministry of Oil (http://www.oil.gov.iq/EXPLORATION%20BLOCKS-BR4.pdf – accessed 5 May 2011).

From the data in Tables 1 and 2 and the map above the following observations are made:

- Priority has been given to gas exploration as manifested by both the sizes and the number of blocks. The seven gas-prone blocks are in the range 6,000-9,000 sq km, with an average of 7,471 sq km per block, while the five oil-prone blocks range from 900 sq km to 8,000 sq km, with an average of 5,680 sq km. Hence, in terms of acreage, blocks with gas potential form 65% of the total area covered by the offered blocks. The preference given to gas-prone blocks was expected in the light of officially declared policy to augment the country's gas reserves to meet the future gas needs for power generation and other industrial purposes, and exports of the surplus, if any.
- Unlike the previous block categorization (in Table 1), the new blocks are divided into two categories of petroleum potentials only: oil and gas. However, we should take note of the fact that the ministry changed the category of new Blocks 1 and 2 to gas-prone while they were classified as 'moderate oil and gas' for old Blocks 14, 15, 16 and 17. Similarly the new Block 8 is described as gas-prone but replaces old Blocks 40-46, which were classified as 'moderate oil'. Having two categories only would facilitate the provisions of the model service contracts in two versions – one relating to oil and the other to gas, if need be.
- The new blocks are much larger than previously announced blocks, except for old Block 19 (now Block 9), which remains the same size. The enlarged areas came as a result of combining and/or re-demarcation of the previously smaller blocks. For example, new Blocks 1 and 2 cover the areas of old Blocks 14, 15, 16 and 17. The new Blocks 3, 4 and 5 are re-demarcations of old Blocks 7, 11, 12 and 13. What should be noticed that the new exploration Blocks 4 and 5 have been moved away from the Iraqi-Jordanian borders, while the new Block 3 maintains its extension to the Iraqi-Syrian border. Are there any geopolitical considerations behind this, and has this to do with the Risha gas field and its possible extension into the Iraqi territory?
- Enlarging the sizes of the new exploration blocks, as such, contradicts international trends and practices. [8] The ministry seems to have not taken note of two important factors in this respect: prospectivity of the area and thoroughness of exploration. Briefly, international experience shows that generally countries with low prospectivity offer large tract to mitigate business risk and to attract oil companies interests. However, it is a well-known fact that average prospectivity in Iraq is very high, and probably the highest in the world. Mr Tariq Shafiq asserts an overall average of 70% exploration success in Iraq, though the country is the least explored major hydrocarbon resource basin in the Middle East. [9] The second matter which the ministry might have ignored is the intensity and thoroughness of exploration activities. Again, international experience indicates that the larger the area offered, the greater the risk that thorough exploration activities, based on the number, location and depth of exploration and delineation wells and the use of advanced technologies and methods, will not take place. In the light of the

above it appears that enlarging blocks' sizes seems uncalled for. Nevertheless the ministry is required to take into considerations these factors when preparing the bidding technical documents and final contract.

- Half of the 12 blocks extend to the sovereign borders: Blocks 1, 2 and 3 extend to the Iraqi-Syrian borders; Block 6 to the Iraqi-Saudi borders; and block 9 (and possibly Block 8) extend to the Iraqi-Iranian border. In the likelihood of petroleum discoveries, this would increase the number of border fields shared with neighbors, and this should prompt the Iraqi authorities to have clear policy and priority regarding these border fields to protect Iraqi interests.
- Area enlargement of the new blocks has led to extending some blocks into more than one governorate/ province. Seven of the 12 blocks now have shared provinces: three blocks with gas potential (Blocks 2, 6 and 8) and four oil blocks (7, 10, 11 and 12). All joint blocks extend over two provinces, except Block 7, which extend over five provinces. Unless the demarcation of authority over hydrocarbon resources between central and provincial powers is clearly defined and adhered to, such joint blocks could face some local difficulties.
- It appears that the boundaries of the new exploration blocks have avoided what could have been legally problematic to varying degrees for a few old blocks. Solid evidence is available to support this assertion for some blocks. During the former regime and while the country was under strict and comprehensive UN sanctions, 'Exploration and Development Contracts' were concluded regarding old exploration Block 8 with India's Oil and Natural Gas Corporation (ONGC) [10] and old Block 3 with Indonesia's Pertamina. [11] Unsubstantiated claims were made regarding old Blocks 4, 6 and 9. Ireland's Petrel Resources claimed, in March 2008, it had concluded a production-sharing agreement with the former regime, which gave the firm "a net production interest in Block 6 of 25-35%". [12] However, I did not find any evidence to support this claim. Another claim was made that "Russia's Tatneft and Stroytransgaz had pre-war arrangements for Blocks 4 and 9 in the Western Desert" [13] Available information indicates that an exploration contract for old Block 4 was negotiated with Stroytransgaz but that the contract was not signed. Hence, nothing is available to support the legality of the claim by Stroytransgaz on this block. As for old Block 9, I did not find evidence to support any claim on it. This is probably why the Ministry of Oil divided the area of that old block among the three new Blocks 6, 11 and 12.
- Domestic politics is or could be an explanatory factor behind the selection of the new blocks, especially for the relatively unexplored provinces of Karbala, Najaf, Muthana and Anbar.
- The offshore block was taken off the list of offered blocks, though it was mentioned in the ministry's plan. No formal reason was given for excluding this block. However, my discussion with an official from the ministry suggests that the oil minister had decided to drop that block because of a new problem with Kuwait. The decision could be linked to the increasingly contentious issue of 'Mubarak Port', which Kuwait is constructing in the proximity of the block and which could negatively affect the Iraqi waterway from the Gulf to the southern port of Fao and undermine its development potential and strategic importance. [14]
- New Block 9 (old Block 19) is the smallest in size (900 sq km) and extends to the Iraqi-Iranian border. But since it is adjacent to Iran's giant Azadegan oil field its oil potential is rather high, making it, "a sure hit," as an oil industry expert reportedly said. [15]

Types And Scope Of The Exploration Contracts

Two issues are of particular importance in this respect: the first is the nature/type of the contract and the second is the scope of the contracts. The first issue addresses the choice between service contracts and production-sharing contracts, while the second issue is about whether the contracts should be for exploration only or for exploration and development.

Regarding the first issue, the Ministry of Oil had made it emphatically clear that the contracts for the fourth bid round would be service contracts, thus putting an end to rumors, speculation or even pressure for production-sharing contracts. IOCs seem to accept the service contract type, though preferring production sharing contracts, but what matters for them are the fiscal terms of the service contracts. Moreover, the ministry has expressed readiness to reactivate previously concluded exploration contracts only if they are converted to service contracts. The two exploration and development contracts concluded with ONGC and Pertamina regarding old Blocks 8 and 3 respectively, referred to earlier, were production-sharing contracts. These two contracts are now "frozen" and cannot be reactivated until they are converted into service contracts, a senior Iraqi oil official reportedly said. "When we have a new service contract in our hands, then we will renegotiate," he adds. [16]

The second issue is whether the service contract should be for exploration only or exploration and development. Three propositions can be explored at this juncture:

- The first calls for adopting "exploration service contracts for all" 12 offered blocks.
- The second calls for using "exploration and development service contracts for all" 12 offered blocks.
- The third calls for using "exploration service contracts for the five oil blocks" and the "exploration and development service contract for the seven gas blocks."

The first, calling for 'exploration service contracts for all blocks', is based on the fact that Iraq already has enough contracts, which if executed as contractually envisaged would provide high production capacity for oil and gas (both associated and free). The argument could go further to suggest that even at half the targeted oil and gas production, Iraq would not need further upstream field development projects. Efforts, therefore, should be spared to insure effective and on-time implementation of the already concluded contracts, especially given the apparent human resource, infrastructure and security limitations and constraints.

The second proposition argues in favor of providing sufficient incentives for bidding companies by combining both exploration and development. This could attract more IOCs, thus increasing competitiveness in the bidding process, which could deliver good results for Iraq. Also, the argument goes, exploration and development usually takes many years to bring new oil and gas on stream, and this could be coordinated with the currently concluded contracts to replenish reserves and enhance production in a timely way.

The third proposition stands halfway between the first two and thus adopts their arguments. Additional arguments to support exploration and development service contracts for the seven gas blocks could be made on the premise of providing gas supplies independent of oil production, thus providing strategic flexibility and diversity.

Taken all arguments into consideration, I would suggest that the priority lies with the first proposition and thus would encourage the Ministry of Oil to follow this route and start preparing the model exploration service contract for all blocks, if and when the bid round eventually takes place.

A Timely Intervention By Parliament

The parliament expressed an early and firm position on the forthcoming bid round. One day before parliament's month-long recess, the Oil, Gas and Natural Resources Committee (OGNRC) of the house hosted Minister of Oil 'Abd al-Karim al-Laibi on 12 May. Among the issues discussed was the exploration bid round scheduled for January 2012.

According to chairman of OGNRC, 'Adnan al-Janabi, the committee asked the minister to delay the bid round and not to sign any more contracts, pending approval of a new hydrocarbons law. The minister refused the request, since the ministry had already launched the process for the fourth bidding round and saw no way to step back. This position by the minister prompted Mr Janabi to assert that OGNRC would ask the parliament to pass a law or vote on a motion preventing the ministry from signing any new contracts. He warned: "Companies should know that any future deals will be considered illegal." [17] According to Kasim Muhammad Kasim, a Kurdish parliamentarian and committee member who was present at the meeting, Mr Janabi had the backing of about three-quarters of the OGNRC – all but the members of Prime Minister Nuri al-Maliki's political coalition. [18]

It remains to be seen whether the parliament will succeed in passing a law or motion preventing the ministry from signing any new contracts, and I fully endorse a law to provide some legal certainty that could safeguards Iraqi interests. Unfortunately, the parliament missed a good opportunity a few weeks ago to assert its authority and constitutional role, and thus continues to accepting circumvention by the executive branch.

On 27 March the parliament voted to abrogate a former law, of 1997, that ratified the development and production contract and the memorandum of understanding (MOU) related to the Ahdab oil field, signed in Baghdad on 4 June 1997 between the Ministry of Oil and China's CNPC. The parliament, in my view, should have insisted that the Ahdab contract of 2008 must also be ratified by law, and thus the parliament should have seen that contract before abrogating the old law.

Thus, not only did the parliament miss excellent opportunity to set a powerful legal precedent for having all other contracts enacted by law, but also the parliament in fact gave its consent to remain passive and be on the sidelines of effective authority regarding such oil contracts. Could and should the parliament restore its role and authority as enshrined in the constitution regarding oil contracts? Yes, I think. But this requires professionalism and adherence to the constitution, not an on-and-off politicization of the issues.

Conclusions And Recommendations
In the light of the above I put forward the following remarks and recommendations in the hope of careful considerations by the concerned parties, especially the Ministry of Oil.

Postponement Of The Bid Round
It is advisable to postpone the proposed exploration bid round to a future date. That date should be linked to the post-initial development phase of all contracts concluded pursuant to the three previous bid rounds. This could mean that the bid round could be held three years after the contracts of the three gas fields concluded pursuant to the third bid round had entered into force, and the three gas fields deliver a sustainable 25% of gas plateau targets as stipulated by their service contracts. The rationale for this postponement rests on three premises: the needs for reserves augmentation, sound planning and legal prerequisites.

There are no compelling grounds to undertake yet another big-push move as so advocated by the bid round. Six months ago the ministry augmented Iraq's proven oil reserves from 115bn to 143bn barrels. The lifespan of these proven reserves (reserves/production ratio) is 145 years based on current production rate of 2.7mn b/d. The ratio could potentially be much higher – Deputy Prime Minister for Energy Affairs Husain al-Shahristani recently gave a new figure, based on recent information, of proven oil reserves as high as 200bn barrels, [19] giving a 203 years reserves/production ratio.

The ministry is hoping to add 10bn barrels of oil from the offered oil blocks. If we accept Dr Shahristani's 200bn barrels of proven reserves, the question then is: does a 5% reserves augmentation justify such a rush for oil exploration at this particularly difficult time? I would safely suggest 'no' for an answer.

The same also applies to gas reserves. The country has not yet even managed to stop associated gas flaring, estimated to be around 700mn cfd of gas at its southern oil fields only, and its non-associated gas reserves are intact. Hence, augmenting gas reserves is not a convincing aim when available reserves remain untouched and associated gas is not fully utilized.

From the sound planning perspective, it is vital to harmonize exploration licensing to the actual performance of the fields' development under current contracts, which are not very clear. By the time the initial development phase for all concluded contracts has been done, enough and significant data and information would be available, and much of the bottlenecks could be sorted out. Thus, the Ministry of Oil would be in a better position to hold exploration bid round.

On the legal side, exploration contracts should be formulated on a solid legal framework to insure legal predictability and certainty. This could be done once the three vital laws are promulgated, namely the Federal Oil and Gas Law (FOGL), the Iraq National Oil Company (INOC) law and the Ministry of Oil law. Though these three laws are, unfortunately, politically driven, and their contents and time of enactment would be subject to what I call the "Muhasasa Disease" of Iraqi politics, it is hoped that the laws would be promulgated within the coming three years.

Having said the above, the ministry's arguments justifying the bid round stand on thin ice, and it should reconsider its timing as suggested above.

Exploration Service Contracts

I would encourage the Ministry of Oil to start preparing the model exploration service contract for all blocks. This implies that the ministry should focus its efforts and energy on this type of contracts only and should not consider other types of contracts. In the meantime the ministry ought to be more proactive and take the initiative to convert as soon as possible the old contracts with ONGC and Pertamina, referred to earlier, to exploration service contracts, if both ONGC and Pertamina are interested in the related old blocks.

When the ministry is done with the conversion of the said contracts, as it did with the Ahdab contract in 2008, the new service contract would set the a precedence for the model service exploration contract that will be used for exploration bid round, when it is held in future date, and regardless of the petroleum potential of the offered blocks.

Focus On Gas-Prone Blocks

Considering the significant commitments already contracted regarding oil production capacity the Ministry of Oil should, if it decides to go ahead with the bid round at any future time, consider focusing the exploration bid on gas-prone blocks only, with the probable exception of Block 9. The inclusion of Block 9 is justified for being located in a border area with high oil potential and in close proximity to the Iranian giant Azadegan oilfield, [20] which Iran is developing at a fast pace.

Parliament Must Have A Say

Finally, the parliament has and should exercise its lawful effective role regarding upstream development contracts. However, the house has been passive and accepts, by will or omission, many maneuvering attempts by the executive branch to circumvent and limit its role in these contracts. But there appears to be a new spirit of determination to restore parliamentary constitutional rights in this area. Hence, if the parliament succeeds to pass a new law or adopt a motion preventing the Ministry of Oil from holding the scheduled bid round, this would surely be a step in the right direction. Tactically, though, the ministry could take the initiative to postpone the bid round soon as a pre-emptive measure against possible action by the parliament, as it is better for the ministry to postpone the bid round by choice rather than by compulsion.

To sum up, I would suggest that: the Ministry of Oil considers postponing the bid round for not less than three years; focuses on blocks with gas potential only plus Block 9, thus reducing the number of blocks from 12 to eight; and works earnestly to convert the ONGC and Pertamina contracts to exploration service contract and adopts the converted contract as the guiding version for drafting the model service contract for the offered exploration blocks, if and when the bid round would be held.

But again, knowing the 'Muhasasa Disease' of Iraqi politics, reality seldom coincides with expectations, let alone with recommendations!

Notes:

1. http://www.upstreamonline.com/live/article253707.ece (accessed 26 April).
2. Equals about $643mn at an exchange rate of $1= ID1,168.
3. See, 'Summary of the Four-Year Plan 2011-14 for Oil and Gas Sector', February 2011, Ministry of Oil.
4. http://www.upstreamonline.com/live/article253707.ece (accessed 26 April). Note that the plan refers to 10, not 12, exploration wells.
5. For pre-qualification announcement process see http://www.oil.gov.iq/5555.php (accessed 30 April). For extension of deadline see http://www.oil.gov.iq/Extension%203.pdf.
6. http://www.energyintel.com/print_me.asp?document_id=716729&pID=31 (accessed 4 May).

7 Oil minister Laibi told *Reuters* that 12 exploration blocks, including the first marine exploration block, would be tendered in the fourth round (http://www.upstreamonline.com/live/article249398.ece - accessed 23 March).
8. See UNCTAD, 'Comparative Analysis of Petroleum Exploration Contracts', 1995.
9. T Shafiq, Iraq's Oil Reserves Revisited And Implications, Parts 1&2' (*MEES*, 3/10 and 17 January).
10.See Law No. 41 of 2001, *Alwaqee Aliraqia* No. 3877, 5 July 2001, ratifying Exploration and Development Contract for Block 8, Western Desert, signed 28 November 2000 between the Ministry of Oil and India's ONGC.
11. See Law No. 51 of 2002, *Alwaqee Aliraqia* No. 3953, 21 October 2002, ratifying Exploration and Development Contract for Block 3, Western Desert, signed 23 April 2002 between the Ministry of Oil and Indonesia's Pertamina.
12. http://www.upi.com/Science_News/Resource-Wars/2008/03/04/Petrel-eager-for-Iraq-west-desert-oil-deal/UPI-94401204662578/#ixzz1HYzSptrU (accessed 23 March 2009) and http://www.oilvoice.com/n/Petrel_Resources_Provides_Update_on_Iraqi_Operations/beeca2ebb.aspx (accessed 18 May).
13. http://www.upstreamonline.com/live/article256480.ece (accessed 13 May).
14. *Al-Sabah* newspaper, Baghdad, 14 May 2011; *Al-Baghdadia* TV, 18 May 2011; http://www.iraq-businessnews.com/2011/05/18/new-kuwaiti-port-could-scupper-iraqs-grand-faw/ (accessed 19 May).
15. http://www.energyintel.com/print_me.asp?document_id=716663&pID=1 (accessed 4 May).
16. http://www.energyintel.com/DocumentDetail.asp?document_id=702394 (accessed 19 January).
17. *Reuters*, 16 May 2011.
18. http://www.iraqoilreport.com/politics/oil-policy/oil-ministry-parliament-battle-over-fourth-bid-round-5703/#comment-22107 (accessed 17 May).
19. Dr Shahristani made this statement to Iraqi and UN officials meeting in Baghdad, 15-16 May: *Iraqiya STV*, 16 May.
20. Azadegan field contains an estimated 33bn barrels of oil in place, with 6bn barrels recoverable. Production from the field was 50,000 b/d in July 2010 and expected to be 260,000 b/d in phase two by 2012, but progress has been slow due to US opposition and sanctions. CNPC is actively involved in the development (http://www.meed.com/3008039.article - accessed 21 July 2010).