THE RUSSIAN ENERGY SECTOR

a special report from
Oil and Gas Investor and
Global Business Reports

Growing Pains

Russia asserts herself as a global player while retaining historical control.

Economic development of the Russian Federation during the past 15 years has been spectacular following an overhaul of its entire socio-economic and political fabric. From a declining centralized economy built upon a sclerosis-struck political system to a fast-developing, emerging industrial country, with a fledging democracy, many older Russians struggle to comprehend the changes.

Despite stalling after the 1998 financial crisis, Russia's gross domestic product (GDP) has grown for six consecutive years, surpassing average growth in all other G8 countries and achieving an impressive 7.1% in 2004. Although encouraging, this growth cannot mask that there is still a great deal of room for improvement in Russia's institutions, its economic diversification and the lot of its 145 million inhabitants. GDP is $2,140 per person; a large number of Russians live in poverty.

Most of the country's economic development base and mooring lines to the market economy were provided by both Russia's large heavy industrial tool and by the Russian Federation's immense subterranean wealth. From steel to aluminum and heavy machineries to aeronautics, Russia has a long history of industrial excellence, featuring extra-large production capacities and a recognized technological and scientific know how. But the real catalyst of the country's fast recovery from the abysses of the early 1990s has been its natural resources, from precious metals to diamonds, coal, industrial minerals and, above all, hydrocarbons.

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Exploited since the early 1920s, Russia's oil and gas sector—a pure product of the Soviet economic drive—has long been one of the world's leaders in terms of production. In the 1980s, the Soviet Union was the world's largest producer, thanks to the combined outputs of powerhouses like Azerbaijan, Western Siberia and the Ural region. With the demise of the Soviet Union, the sector fell into disarray, facing depressed world prices, aging fields and production tools, and murky privatization processes driven by prevarication and violent dealings.

It took some years for the Russian sector to emerge from the shadows and regain its place on the global stage.

After ownership structures were streamlined, assets gathered under unified control, management control firmly established and the violence subsided, the sector began its in-depth reform, applying progressively more modern management techniques, accelerating the use of yield-increasing technologies and pushing production upwards.

Production was some 6 million barrels per day in 1996-97, down from a Soviet peak of 12 million in the early 1980s, and 1.6 billion cubic meters (Bcm) of gas in 1995. The figures have soared to 9.45 million barrels of oil and 1.73 Bcm of gas per day today.


Russian spring conditions: a drilling pad in the Siberian marshes

Oil production seems to have reached a plateau, triggering comments on the complacency of the Russian energy sector, which has been pampered by high oil prices during the past three years. Nevertheless, the Russian Federation is sitting on the world's largest gas reserves (1,680 trillion cubic feet or one-third of the global total) and oil reserves total 51 billion barrels.

Moreover, the Russian Federation holds yet more undiscovered potential—in East Siberia, offshore Pacific (with the Sakhalin

Useful Date

June 20-21, 2006: Russian Petroleum and Gas Congress, 2006. This is the compulsory meeting of professionals from across the Russian Federation and the former Soviet Union.

Archipelago as a point in case) and along its continental shelf, in its Arctic regions. These are besides the relatively well-mapped reserves of Western Siberia that make the bulk of Russia's output today, plus the reserves in the older provinces of the Urals, Tatarstan and Bashkortostan, which are now in decline.

Future discoveries should accelerate development of the industry, which already accounts for more than 20% of the federation's GDP and, some years, provides more than 40% of federal revenue.

Entry opportunities

Today's picture might appear challenging to potential entrants. For the majors, the infamous Yukos affair is still felt outside of Russia in perception of investment risk and business protection. The many changes in the tax regime, subsoil laws, conditions of access to export infrastructure, and the general erratic legal climate of the country can still be perceived as detrimental to investment. Nevertheless, the world's majors are jockeying for positions and assets, and rumors of deals are reaching climactic levels.

For independents, the situation is also far from straightforward, as predatory Russian majors remain threatening, access to capital is still far from easy, and operating conditions remain challenging, from harsh winters to export-pipeline access and an unforgiving tax structure.

For the service industry, the situation is also peculiar—most of its components are either part of oil majors, providing services to their mother companies, or former parts that are trying to reinvent themselves and their markets.

This leaves some room for Western service operators, which have been reasonably successful. The sector is now initiating a very active concentration and restructuring movement that should re-shape durably. This in turns opens many opportunities for partnerships and acquisitions, and the Russian service sector should look radically different in a couple of years.

Ultimately, the transitional Russian energy industry is illustrated by changes under way now and instigated by the Russian state itself. The legal regime should witness a major upheaval when a new subsoil law comes into effect at year-end, further to its amendment by the federation's Duma (lower chamber).

The industry is waiting for a number of key dispositions that should streamline and simplify E&P, but very wary of forthcoming restrictions of access to "strategic reserves" for foreign investors, a limitation that is being monitored with apprehension by the global hydrocarbon industry. A possible revival of the production-sharing agreement law could boost levels of greenfield development, after the previous law was scrapped notably on Yukos' former boss, Mikhail Khodorkovsky's, injunction.

Meanwhile, Russia is busy trying to create a national oil company to protect its sovereign interests. A stalled merger between state-owned oil company Rosneft and state-controlled gas giant Gazprom paved the way for the Russian government to increase its direct participation in Gazprom, now controlled 51% by the state, while Rosneft, after having acquired on the cheap Yukos' main production unit, Yuganskneftegas, has since been rumored to be in merger talks with Shell and fifth-largest Russian oil company Sibneft.

Since then, Gazprom and Shell have entered agreements to swap assets and there are obvious indications that the public-owned oil and gas companies in Russia are there to stay, and will play very central roles in the future development of the industry.

The movement towards reasserting state control signaled by the onslaught against Yukos and its subsequent dismantling is highlighted by the efforts exerted in developing state-owned operators.

It is further confirmed by the groundbreaking projects nurtured by state-controlled pipeline transportation monopoly Transneft. A 4,130-kilometer (2,566-mile) pipeline to the Pacific will transport some of Russia's oil wealth to Asia and should provide a major boost to the development of East Siberia.

Meanwhile, gas pipelines to the Northern Europe pipeline and to, again, China and Asia should increase Russia's role as the world's largest gas supplier.

Turning point

At times of skyrocketing oil and gas prices, an inextinguishable global thirst for energy, and uncertainties over Middle Eastern energy supply, Russia is poised to play an ever-increasing role on the global energy stage. This calls for a vigilant state presence, and for controlled development.

Should Russia go the right way, treading carefully between national interests and global responsibilities, the country will surely be the hot spot for the next two decades. The risks of backtracking to an erratic, unsafe and unwelcoming environment are slimming, despite frequent hiccups involving nationalism and protectionism.

The stage is set for a responsible, rewarding and secured development of to-be-discovered reserves, and a responsible development of known resources. Russia, as so often throughout its history, is at a turning point. The country's oil and gas sector is reaching a critical time in its life cycle, and seems to be heading towards a conventional model, opened to foreign investment, yet encompassing large state-controlled organizations.

The dust has settled over the challenging years following the demise of the Soviet Union. The global industry is carefully looking at what is emerging in this Eastern giant. Global Business Reports met with Russian industry leaders to prepare this report. It is intended to present the challenges at stake. □

Useful Contacts in the Russian Federation

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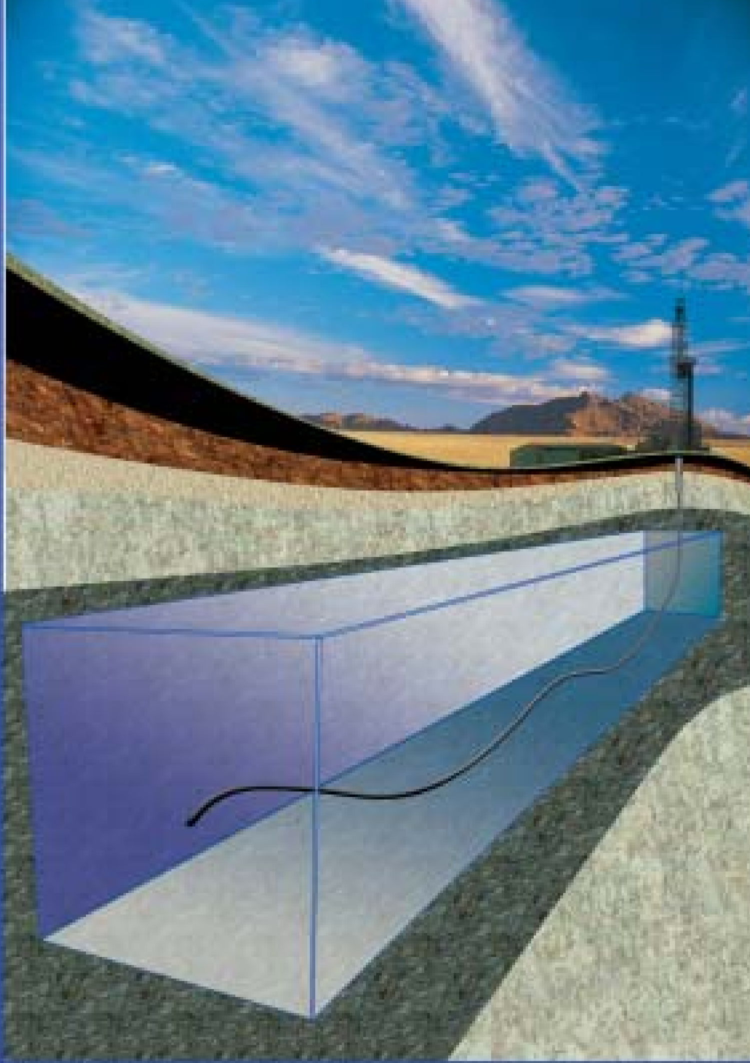

Taming the Bear

To say that Russia is richly endowed below surface is an understatement.

As far as hydrocarbons are concerned, a third of the world's gas is held in the Russian Federation, while its 51.2 billion barrels of oil reserves are the world's eighth-largest geopolitical concentration.

The Sakhalin 2 project has long been the region's showcase, as first oil was produced in 1999 and the first liquefied natural gas (LNG) shipment should be steaming off to Asia by summer 2008. Sakhalin 2 has reserves of some 150 million tons of oil and 500 billion cubic meters of gas, and includes an LNG plant with 9.6 million tons of capacity, currently half-finished.

Costs have outstripped estimates (doubled to $20 billion) and jeopardized the development of the venture. To make matters worse, Shell, whose 50% stake is the largest, was recently informed by Russian gas company Gazprom of its intention to swap 25% of Shell's stake in the project for a stake in its currently undeveloped Siberian Zapolyarnoye gas field, putting Shell in a questionable position.

Not to be outdone, Sakhalin 3 has also had an appetite for controversy. In January 2004, the Russian government cancelled the results of a 1993 tender, won by a consortium led by ExxonMobil. State-owned Rosneft replaced the U.S. companies and now holds a 75% stake in Sakhalin 3, illustrating the Russian will to keep a tight control of its most strategic assets, as well as confirming the increasing influence of Russia's two national state-owned champions, oil company Rosneft and gas giant Gazprom.

Russia's minister of natural resources, Yuri Trutnev, has indicated that Chevron and ExxonMobil would be given priority if they decide to bid again, this time for 49% of the project and to continue development, presumably with Rosneft.

"Having developed infrastructure in place, Chevron and ExxonMobil have certain advantages," Trutnev says.

Work at Sakhalin 4, a co-venture of BP (49%) and Rosneft (51%), was shelved due to poor initial exploration results, and Rosneft announced withdrawal from Sakhalin 6 after poor results. In turn, Sakhalin 5, also featuring a venture of BP and Rosneft, is a very promising block, and BP has indicated it would invest up to $5 billion in the development of which more than $150 million will be allocated to exploration drilling through 2008.

The mixed picture of what was once presented as the new gas frontier is worrisome: costs estimates are surpassed, tenders are cancelled and poor exploration results are urging the global majors to approach huge upstream investments in the Russian Federation cautiously.

Asset development

One mega-project is Shtokman. In the Russian sector of the Barents Sea and discovered in 1988, Shtokman is one of the world's biggest gas fields, with reserves of 3.2 trillion cubic meters of gas and 31 million tons of gas condensate. Development plans include an LNG plant for exports to the U.S. and have been put under Gazprom's close supervision.

Future potential partners have been queuing up to guarantee their participation. Recently, Gazprom announced that Norway's Statoil and Norsk Hydro, France's Total, and the U.S.'s Chevron and ConocoPhillips have been short-listed

to “be invited to intense commercial talks” with a view to select two or three companies to form a consortium in the first quarter of 2006 for field production and transportation operations to the shore.

Yet, the final shape of and participants in this $10- to $25-billion venture are still unknown. What has emerged in the last five years is the increasing role played by domestic state-owned operators Rosneft and Gazprom, now deemed unavoidable partners for any large-scale project and are very potent partners.

Gazprom is the world’s largest gas producer and distributor, while Rosneft has been beefing up its oil reserves and production through a string of acquisitions. The recent reinforcement of these two companies is a clear testimony that Russia is determined to hold on to its underground wealth and is wary of foreign access to its hydrocarbons.

At the other end of the spectrum, independents are treading water in some rough seas. Only the fittest have shown resilience and ambition, and have started reaping the rewards of their demeanor. Following the demise of the Soviet Union, many small-scale operations sprung up, most notably in Tatarstan, where voluntary policy pushed by the republic’s presidency and the local major Tatneft (Russia’s seventh-largest producer) created a haven for independents.

***...Independents** are treading water in some rough seas. Only the fittest have shown resilience and ambition....*

Although most of the local minnows benefit either from Tatneft’s direct equity involvement, or from the support and stake-holding of the professional association Nefteconsortium, they also enjoy a relatively free rein in their operations. After experiencing a steep decline in production in the late 1980s, Tatarstan’s production has risen back to 30 million tons per year, notably thanks to the work of the local independents. Some 5 million tons of those tons will come from 96 oil fields exploited by Tatneft, and 36 fields developed by 28 independents.

Nefteconsortium was created to host them under a single roof, and provide administrative, technical and financial support.

“We believe Tatarstan is a very specific oil province in the Russian Federation, as there is a genuine local will to see independents succeed, and there is also a good understanding of what their specific needs are, after having seen their birth and rise over the last 15 years,” says Fanis Valiev, general director of Nefteconsortium.

Largest independent

An inspiring story is that of local major Tatex and its successful venture with Ocean Energy Inc. (now a part of Devon Energy Corp.). Tatex is today Tatarstan’s largest independent, with expected oil production of 491,000 tons this year from two fields.

“Where we contributed in the early days is from the capital side,” says Sergey Faerman, Devon’s Russia country manager and also president of Texneft Inc, Tatex’s U.S. partner.

“We made it possible to develop

Land of contrasts, Russia is host to many wonders: The Cathedral of the Transfiguration and its 22 domes, on Kizhi Island, north of St. Petersburg

these fields earlier than they would have been developed. In addition to providing capital and technology, we have contributed to the image of our partner as being a company that is not afraid of being looked at as one of the progressive leaders of the industry."

Since inception, Tatex was the first independent to successfully implement dual completion works on its fields, hydrofrac operations, as well as sell, install and operate vapor recovery units (VRUs) with more than 150 VRUs now installed all over the Russian Federation. This has helped this joint venture to further epitomize the success of international cooperation in the Russian Federation.

Irek Khairullin, Tatex's general director, says the main achievements are "the fact that our company is now cash-flow-positive, has built a great infrastructure and has been paying dividends to the shareholders. These dividends are being reinvested by the shareholders into the company's development, which shows the respect and the trust they place in this company. We now hope to develop further, particularly geographically."

Other Tatar minnows are also growing fast and following the integrated model of the majors. Sheshma Oil, established in 1998 with a license for three fields yielding 30,000 tons from unbalanced and underproduced wells, has increased production to 285,000 tons of oil this year from 230 producing wells and plans 25 wells for drilling before the end of the year.

With in-house well-workover services, enhanced-oil-recovery capabilities, an electro-chemical pipe-plating workshop and its own construction company, the company has strong potential.

General director Rustem Takhautdinov says, "At least 25% of the company's future revenue will be provided by service activities. It is a more difficult activity range than oil production, but the needs in this region are important, and we want to develop our abilities to serve others with what we know the best from our operations."

Following the active lobbying of organizations like Assoneft, Nefteconsortium and others, the minnows were finally acknowledged as important actors of the oil and gas sector's dynamism. Yet, until three years ago, the development of independents was severely hampered by a number of factors. The majors' appetite for assets first affected many independents' survival. By limiting access to infrastructure, such as local pipelines, treatment plants and export facilities, the majors in some cases kept a stranglehold on the minnows, sometimes obliging them to give in and sell their assets.

London-listed

If examples of independents losing the fight abound, there are also cases of struggling, yet eventually successful, independents like Sibir Energy. A Russia-focused, London-listed company, Sibir has been somewhat of an anomaly in the Russian sector. Developing and producing its own oil fields in Siberia, the company has a stake in the coveted Moscow Oil refinery, has engaged successfully in trading activities and is involved in one of the most acclaimed developments of the last two years.

Upon completion, this $1.25-billion project, a 50-50 venture with Shell called Salym Petroleum Development (SPD), will be one of the largest foreign investments with foreign capital in the Russian energy sector, with 800 wells drilled and an expected cumulated production of up to 6 million tons per year by 2010.

This success is very good news for the two stakeholders: Shell, whose Russian fortunes have been mixed, and Sibir, who has endured a decade of effort, fights and controversies.

Henry Cameron, Sibir chief executive, says, "Sibir might be the only independent company of this scale to have survived in Russia. We are a bit of an attraction, and there is now an appetite for investors to see Sibir succeed. We reap a lot of loyalty from our shareholders for all these years of work and effort. Slowly but surely, as the projects matured, the knocks became less important and today, with the success of Salym, we are reaching a turning point of this company…."

The next clutch of difficulties for would-be upstream players used to be access to the state pipeline monopoly

Still a major concern *for many is the tax regime, which penalizes companies at times of high oil prices….*

Transneft. Due to a genuine lack of capacity, coupled with a certain reluctance on the part of state authorities, Transneft wouldn't grant access to its system, therefore condemning small players to sell their crude on the undervalued local market or build their own export infrastructure. In the last five years, the situation has improved greatly and many independents have highlighted that accessing pipelines is easier today than ever, despite a still-crippling lack of spare capacity.

Equally, Gazprom was said to have made a lot of effort to grant access to its gas transport infrastructure, here again providing an encouraging signal of the large players' change of attitude.

Taxes

Still a major concern for many is the tax regime, which penalizes companies at times of high oil prices, as it lacks a progressive calculation mode. This issue has attracted the attention of natural resources minister Trutnev, and reform is in the works. After years of public outcry from the industry, in particular from smaller producers harshly penalized by the current regime, this news is one of the best signals sent to independents during the last five years.

Yet, the ill-adapted tax regime, limited access to infrastructure and inapt legal frameworks have never managed to prevent large and small players alike to consider Russia as a priority area for business development. ConocoPhillips' entry to Lukoil's capital or the BP-TNK venture are groundbreaking operations that have helped disperse remaining foreign anxieties born from the Yukos affair. TNK-BP, despite difficulties including the Russian Federation's tax claim (recently reduced to acceptable levels) and unnerving uncertainties on the Kovyktinsky gas field, remains a success story. But the development of the latter issue will be a test of the Russian authority's true intentions for foreign investment.

Kovyktinsky, the largest gas field in Eastern Siberia with estimated reserves of 1.9 trillion cubic meters, is developed by Rusia Petroleum, which is majority-owned by TNK-BP. Here again, the notion of "strategic reserves" is crystallizing a great deal of uncertainty about this project and TNK-BP is eager to see the Russian authorities clarify their views. Until then, the venture, along with other large foreign corporations, may see some of their investments questioned.

Despite these signals, the attractive potential of the Russian Federation remains very important. Today, about 75% of Russia's ground-oil fields are being developed and are reckoned to be 50% exhausted. The replacement rates are worrying, at around 50%, and exploration capex is only half of what it should be, lagging between $1- and $2 billion per year.

But potential for further growth abounds, in Eastern Siberia, the Arctic regions and offshore. The Russian natural resources ministry is expected to put up to 240,000 square kilometers of sea shelf for auction for geological exploration before 2010. Total reserves of these offshore territories are estimated at 90- to 100 billion tons of oil equivalent, 80% gas.

These resources will be able to supply a large part of Europe's gas need and some of the United States' for decades. But this will not be possible without close cooperation of foreign players and Russian entities both state and private.

This has already been recognized by most of the key operators in Russia, and a lot of the positive changes registered in the last year or so are to be attributed to this recognition. Yet, there are still causes for uncertainty, some of them major.

The exact strategy regarding the role and shape of the state-owned upstream operators or the final content of the future subsoil law are only some of these clouds that are taking too long to clear. For the future to be bright and cooperative, Russia has to act clearly and quickly to define the shape of its oil and gas industry of the next 50 years and the degree of openness, serenity and security it is willing to guarantee. □

Pipelines

Russia's future mega-projects aren't solely about extracting mineral wealth, but also about transporting it. With 49,000 kilometers (30,500 miles) of main oil pipelines and 222,000 kilometers (138,000 miles) of gas pipelines, Transneft and Gazprom are the largest pipeline operators in the world.

Future projects will consolidate these positions. For oil transportation, the last large, implemented project of the region was the Caspian Pipeline Consortium (CPC), a multinational project operational since March 2001 and transporting oil from Kazakhstan to Russia's Black Sea port of Novorossiysk. Involving the Russian state as a shareholder, the project has been controversial, as Russia was reluctant to see foreign-owned pipeline infrastructure on its territory as well as being a transit country for Caspian oil.

The congestion of the Bosphorus shipping lane provided extra worries to the shareholders of this groundbreaking project.

Meanwhile, the Blue Stream project is now operational, delivering Russian gas to Turkey through the deepest underwater gas pipeline ever built.

Today, the center of attention is the Pacific pipeline project. Construction is to start in December 2005, and it is to be completed by 2008. The length of the route from Eastern Siberia to Perevoznaya on the Pacific coast of Russia is 4,130 kilometers (2,566 miles) of four-foot pipe, that eventually will carry between 56- and 80 million tons a year when combined with railway infrastructure.

State-controlled Transneft will own and operate the pipeline, which should involve leading engineering companies like Stroytransgas for its construction. The total cost is expected to reach $16 billion.

The North European gas pipeline should also be a reference project directly connecting the Russian gas network with Baltic-region countries and the European gas grid. This 739-mile gas pipeline will run under the Baltic Sea from Vyborg to the coast of Germany (in the vicinity of the town of Greiswald).

Construction of marine gas pipeline sections to deliver gas to consumers in Finland, Sweden, Great Britain and other countries is planned. Construction started in August 2005 and is to be completed by 2008. The cost of the project is estimated at $7.8 billion, of which $5.7 billion is to be allocated for development of the South Russian gas field.

For these projects, financing will be a major issue, and the opening of Gazprom shares to foreign investors, as well as large bond issuances by both Gazprom and Transneft, are expected to ease access to the massive amounts of capital required to bring these projects to full completion. Once again, Russia is finding itself on top of the rankings for project size.

Learning Curve

How does one service an industry that explores and extracts hydrocarbons across 6.56 million square miles and 11 time zones?

During Soviet times, oilfield services—from drilling to hydro-fracturing, downhole services, engineering and construction services—were geographically organized and attached to specific production organizations. There were drilling teams and oilfield-service brigades working exclusively in Tyumen, in the Ural region or in Tatarstan, and attached to their regional upstream state "companies."

These teams were a depositary of technical excellence and operational capabilities corresponding to the operating environment where they worked, and the oil and gas fields' structures and reservoir conditions specific to their regions. With the break-up of the Soviet Union, these teams found themselves attached to the newly created Russian oil majors and operating under more commercially sound strategies.

When the majors expanded their operations beyond original centers, and sometimes abroad, the service teams' lack of exposure to different environments and their unfamiliarity with the associated technical challenges became apparent. Meanwhile, foreign service companies that had arrived during the last years of the Soviet Union or at the very dawn of the New Era were in turn displaying a great deal of flexibility, cutting-edge techniques, and business savviness that was badly lacking to the home-grown players.

Schlumberger, one of the earliest movers, started building a strong local base, cooperating closely with the local majors.

The metamorphosis of the service sector is taking longer than the upstream reshuffling. While the latter first engaged in a rush for assets, followed by a streamlining of operations and a certain attempt to concentrate (notably under state implosion), the service sector has been rather slow to evolve. The main reason is, of course, its integration in the corporate structures of the Russian oil and gas majors, which are busy sorting out their upstream concerns before considering reorganizing and spinning off service divisions and other noncore upstream activities.

Today, oil and gas majors still handle around 70% of their services internally, leaving only 30% to local and foreign companies. The time for more radical change has come, and the service industry has already shown some progress.

Modernization

First and foremost, the needs of the Russian industry have evolved fast, and the industry has learned to become extremely demanding on the services and technologies deployed upstream, midstream and downstream. This is partially due to the influence of foreign service players, who compete through sheer quality of service, and to radical changes in mentalities in the industry since the early 1990s.

From a purely quantitative approach, the Russian industry has moved into a more quality-oriented approach, with renewed consideration ranging from more proper and careful asset management to a need for better reservoir understanding and care backed by the appropriate use of the latest technologies available, from state-of the art reservoir modeling and directional drilling to well stimulation.

The use of these techniques also allowed foreign service companies to charge premiums ranging from 10% to 80% over Russian service companies' prices. With oil prices skyrocketing and easy oil getting thinner, the Russian upstream has been happy to spend the extra buck, and learn quickly how to unlock maximum value from its assets.

The Russian industry has now looking at spinning off the last remnants of its formerly vertically integrated structure. Drilling teams have been spun off into subsidiaries, a prelude to their complete sell-offs and independence. Specialized operations have already been turned into independent companies and a few major service operators have been created.

Midway between the oil and gas producer and the service player is Ritek, which is expected to produce 2.6 million tons of oil (19.4 million barrels) this year. Created in 1992 by the will of the giant Lukoil, the company was put in charge of

The Zapoliarnoye gas condensate field is one of the largest in the world. (Photo courtesy Stroytransgaz)

developing difficult oil fields, depleted reservoirs and declining wells that the major was reluctant to exploit itself.

The company has developed know-how and become a specialist in dealing with challenging production conditions, exporting its equipment and its technology to Oman, China and in the near future to India. From a major's divestment (although Lukoil is still the majority owner of the company with 59.1%), a strong hybrid niche player, both service provider and oil company was established.

Valery Graifer, Ritek president and Lukoil chairman, says, "In the years to come, we'll continue producing innovations and extracting oil. For us, the innovative approach is a priority. Today, the standard oil recovery factor in Russia does not exceed 35%."

Ritek works at engineering solutions that allow extracting 60% to 70% of oil from a well. "Thanks to fiber-optic systems, for example, we can significantly increase the oil-recovery factor and tap resources more carefully," he says. "I expect that all the efforts put into our research activities will bear fruit within two years."

Valery S.Graifer, president of Ritek: looking and thinking ahead

Another precursor in the service industry, this time a pure service operator, is Petroalliance, a company created in 1989 as a U.S.-Soviet venture. Based on cooperation with U.S.-based Western Atlas (now part of Baker Hughes), for years, the company has been the uncontested leader among Russian service companies, expanding its range of activities from seismic acquisition and modeling to onshore and offshore seismic surveying, well workovers, field modeling, logging, drilling support and other services. It has also been the only company able to compete head-to-head with foreign players like Schlumberger, Halliburton and Baker Hughes, betting on its perfect understanding of local operating conditions, the Russian oil and gas industry and associated political connections to ensure a strong presence in Russia, as well as in the Caspian region, notably Azerbaijan.

In Russia, Petroalliance is estimated to control 4% to 5% of the oil-service market. The company has always been deemed very close to Russian giant Lukoil, which ensured it with a sizeable amount of work throughout its 16 years of existence. But lately its largest destiny shift came with the entry of Schlumberger as an investor in 2004 with an initial acquisition of 26%, confirmed earlier this year when Schlumberger purchased another 25%, bringing its total stake to 51%.

The purchase of the rest of Petroalliance is in 2006. Today, with offices in Houston and Moscow, Petroalliance is a player to be reckoned with on the global stage, and Schlumberger's majority stake is a clear testimony of how the

The Krasnodarskaya compressor station, part of the Blue Stream pipeline delivering Russian gas to Turkey. (Photo courtesy Stroytransgaz)

Russian service industry can also be an attractive playing field for the global industry.

A new breed

The game is certainly worth the effort, as most of the industry reckons that the overall value of the service market approaches $10 billion per year, with a level of maturity that has yet to match that of its Western counterparts. Despite the presence of most of the large international players and the rise of strong local contenders, the midsize market is relatively limited, and structured much in the way the top segments used to organize their services.

The small and medium-size E&P companies still rely, in part, on their in-house capabilities to service their fields. In Tatarstan, for instance, most of the independents have enhanced-oil-recovery capabilities, cementing and casing, logging and usually a set of other capabilities. This, in turn, limits the potential size of the market highlighted by sharp increases in drilling costs, from $110 000 to $300 000 on average in only four years, (yet still well below Western averages).

Higher costs have signaled that companies will have to look for more efficient ways to drill, and increasingly subcontract field operations, maximizing yields and asset life.

This change in the operating conditions has encouraged the development of strong local contenders, with or without foreign backing. One such upcoming local player is Moscow and Samara-based Eurasian Drilling Co. (EDC). Today the largest private drilling contractor of the Russian Federation, the company is a spin-off from Lukoil Bureniye (Drilling), a subsidiary of Russia's largest upstream company.

Following the acquisition of 11% of Lukoil by ConocoPhilips in 2004, EDC purchased the assets of Lukoil Drilling for $130 million, including $60 million in debt, and committed $75 million for equipment upgrades and renewals. Today, the company is Russia's largest drilling company, and is also working in Egypt, Iran and Oman and has the firm intention to strengthen its leading position and expand its activities throughout the former Soviet Union's territory. Performing 15% to 20% of the Russian Federation's inland drilling today, EDC is poised to remain a very key player in the years ahead.

Yet, many members of the service community still perceive the company as a Lukoil subsidiary, casting doubts on the self-proclaimed independence of the operator. Whether EDC will perform as a regular market player governed by the laws of competition and fair business or if it will benefit from a cozy captive market with its former mother house is anyone's guess.

The former Soviet Union was a collection of all types of terrains and environments, a good training ground for EPC contractors. (Photo courtesy Stroytransgaz)

Teaming competencies

Meanwhile, the sheer size of the industry has attracted a set of other interesting players. Looking to build a position in drilling and oilfield services, Integra is a new generation of player. Backed by Western private capital, the company acts as a holding, with a view to purchasing service assets across Russia, and now encompasses drilling, workover and geophysical activities after purchases in Western Siberia and the Komi region.

"With 40% of the market serviced by small and midsize companies, the potential for horizontal and vertical growth is large," says Felix Lubashevsky, Integra's chief executive. "My belief is that we are at the beginning of a consolidation movement that will extract seven to 10 players that will be a mix of majors' subsidiaries, foreign players and independent players controlling up to 70% of the market."

For Integra, the largest areas of growth in the years ahead will be Eastern Siberia, South Tyumen and the Yamal province, he says. In this case, the real challenge is managing a smooth development and the coordination of very different assets gathered in one ad hoc structure.

This model was also followed, yet on a smaller scale, by Petroservices, another gathering of various companies under a single roof. Manufacturer and supplier of downhole equipment, the group also produces hydrodynamic research tools, carries out monitoring and measurement services for drilling, including hydrosounding, as well as activities in pipeline-flow measurement, IT and other services. Petroservices presents a convincing profile for foreign companies willing to enter the Russian Federation's market and use an existing vehicle to develop activities or find a partner.

"Our first aim was to get together operations that would not have gone far on a stand-alone basis," says Mikhail Damaskin, Petroservices general director. "We can now centralize their marketing, sourcing, and sales efforts and concentrate on building synergies. All these things these companies might not have achieved by themselves."

Indeed, in a country where companies have been used to deal with in-house services, convincing them to call upon external companies isn't necessarily easy, so one has to display strong credentials to become a recognized contender. With service contracts usually signed for periods of one year, pressure weighs heavily on the shoulders of service contractors who have to renew their lifelines every year and face the

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threat of permanently losing their contracts.

For drilling contractors, the competitive threat can take unexpected shapes: major global players like KCA Deutag and Weatherford are already present in the Russian Federation, pulling the sector upwards as far as quality and diversified service approaches are concerned. The new threat is now emerging from the east: Chinese drillers have already started to penetrate the market in Eastern Siberia and the phenomenon is expected to grow in the years ahead.

"This is taken seriously by most of the actors of the sector," says the senior manager of a leading service contractor. "This is why we are strengthening our operational and corporate structures, so we are able to approach our clients with critical mass, alongside solid services and offers. As most of the operators won't be able to engage in a price competition for long, the threat has to be addressed through quality and privileged partnerships with the upstream players."

As a result, companies like IDS (Intellect Drilling Service) have appeared. Made up of experienced drilling specialists, IDS is an engineering and service center looking at extracting and maximizing customer value from the extensive Soviet and Russian experience in drilling.

"We have to work on changing mentalities besides improving our clients' bottom lines and striving to improve the overall quality level of this industry's drilling activities," says Alexey Messer, IDS general director. "The sector is still reacting slowly to new products and services available to improve operational results."

Through increased competition and changed market expectations, a rush for recognition has begun for those who don't benefit from protected markets inherited from the past.

Former giants

Recognized service players in the Russian Federation include those in place for many years. In engineering, procurement and construction (EPC), the uncontested leader is Stroytransgas, a giant player, directly descended from the MinNefteGazStroy, the Soviet ministry of oil and gas construction.

Turning over more than $1 billion, with 20,000 workers, the group specializes in pipe engineering and construction, such as power stations, compression stations, development and operation of oil and gas fields, and civil engineering.

The company has built large chunks of the Russian-region pipeline infrastructure and worked on large international projects like Blue Stream that brings Russian gas to Turkey through a 396-kilometer pipeline, partially running under the deep waters of the Black Sea and the deepest pipeline project ever achieved.

The company also set world records of productivity in this project, and displayed a breadth of know-how, from micro-tunneling to the laying of a critical gas infrastructure in a seismic region. Stroytransgas has also been involved in projects in Greece, Finland, Algeria, India and Kazakhstan.

Currently the company is building pipelines in Sudan and India and recently won a new EPC contract in Algeria. Despite being the direct descendant of a state-controlled structure and notwithstanding its sheer size, Stroytransgaz displays a very modern front, has streamlined its business, separating units and establishing subsidiaries to gain efficiency points, and is constantly looking at ways to be best-in-class.

Alexander Lavrentiev, vice president and head of strategic management, says, "Selecting between the different ways to develop ourselves is not a threat or a difficulty but an opportunity to open new prospects. The main difficulty in Russia is linked to the development of market relations. The biggest Russian client still has attitudes that are different from normal international practice.

"Normally, the client divests and outsources EPC. But here, some Russian clients think it is better to spend money inside the company than outside. International practice has shown that only in very stable administrative systems this approach could be imposed. At Stroytransgaz, with extensive international experience working on a pure EPC basis for Bota, Sonatrach and other clients, we believe that market drivers will push Russian clients into more market-orientated approaches."

Educating the market is therefore another task taken by Russian service players when trying to tap into the 70% of services still completed in-house. Bringing in the latest technologies and using capital-intensive techniques to maximize the use of an asset or the quality of infrastructure is now becoming accepted as common practice.


Drilling and oilfield services are tomorrow's hot play in the Russian oil and gas sector.

Much work remains to be done on shifting business paradigms and organizational habits, from a vertical approach, where total control over a project is the norm, to subcontracting and the use of modern appropriate instruments.

"Stroytransgaz accepts construction contracts," Lavrentiev says. "It also accepts EPC contracts. We had to construct the whole chain of these competencies. Now we are working on our processes to see which link needs to be strengthened. We have found out that we have to develop our engineering companies and project-management capabilities. We learned a lot from large international players and American corporations to see how they organize themselves and we see now that we still have opportunities to structure ourselves in a way that could be more efficient."

Chinese companies are adding supply to the Russian land-rig market.

From a rigid structure and frame of activities, companies like Stroytransgaz have learned to radically change their profiles, and to adapt more precisely to their environment. They became key global contenders in very short periods of time and are more eager than ever to reap the benefits of their visions.

Russia is looking at building one of the world's largest oil pipelines, connecting Western and Eastern Siberia with the Pacific. It is also involved with the biggest gas production and transmission project in the world—connecting the Yamal-Nenetski province to Europe through the Baltic region (already Stroytransgaz was involved in the construction of a gas pipeline connecting Yamal to Europe via Belarus), as well as some possible interconnection between the Russian grid and Asian and European markets.

In other words, the future is bright for the few Russian mega-players that have managed the transition from state administrations to fully recognized international players, displaying know-how, competitiveness and an appetite for global growth.

Vertical and horizontal

Other large players have developed through both vertical and horizontal growth. One example is MNP, a group owned by OMZ, a Russian steel concern. MNP has gathered shipbuilding activities (at five shipyards) with ship machine building, drilling tools and drilling equipment divisions and a strong heavy offshore design and fabrication capability. This is in part due to the acquisition of U.S. offshore design and engineering company Friede Goldman.

Michael Kosslapov, MNP president and chief executive, says, "The market is slow for heavy land rigs these days." Competition from the East is increasing and becoming a source for concern.

"We have to be wary of the Chinese competition in this segment, with players like Baoji that are stepping up their presence in this market. For our group, we foresee growth potential in smaller land drilling rigs like modular cluster rigs."

As for the rest of MNP's business, offshore design today represents 15% of total activities and could well go up, with Caspian projects providing the bulk of this growth momentum. The company already participated in the construction of equipment dedicated to Kazakhstan's offshore fields, notably for Italy's Saipem. A large integrated player like MNP—benefiting upstream from metal supplies from its mother company, midstream from fabrication yards and shipyards, and downstream from a wide array of subsidiaries—still needs to work hard on its strategy to face competition and maximize its own growth potential.

In the case of its drilling equipment activity, the opening of service centers is expected to provide the differentiation necessary to cope with Western and Chinese competition.

Niche excellence

After being cast in the shadows of unforgiving international competition, local equipment makers are seeing light at the end of their tunnel. Such a significant player is Volgaburmash, the country's leading maker of drilling equipment, and one of the world's largest producers of rotary drillbits.

After difficult years, the company successfully restructured itself and expanded marketing efforts into Asia, the Middle and the Far East, North and South America, Africa and Australia. Meanwhile, it upgraded its production tool and expanded the range of its products, today offering 350 different bits, from three to 26 inches.

"We were successful in coming to terms with our past and efficiently shape our present," says Michail Gavrilenko, Volgaburmash president.

"And today, we have learned to forget about having complexes on our products: after serious efforts and capital expenditures, our quality and our services can today rival on the global stage. Our past in unrivalled and we are working hard to make our future the same."

Despite the optimism, Gavrilenko worries over the purchasing policies of Russia's large upstream players. "Nobody knows what they buy, to whom and for what prices," he says.

In the shadows of the large groups, smaller players also try to find a place in the sun, and here again, offer reasonable opportunities of investment and cooperation. The Soviet Union's tradition for scientific excellence has left behind a plethora of highly qualified technicians and engineers eager to embrace opportunities.

A wealth of entrepreneurs and bright minds has established small businesses, sometimes one-man shows based upon a single technical innovation. A decade on, and some of these players are still around, some thriving, others striving to move to the next phase.

The cutting edge of their products and services deserve attention from the oil and gas investment community, but Igor Melnikov, chairman and president of Petroservices, draws limits to foreign investors willing to step in the service industry.

"We are very happy to see foreign companies coming and bringing their know-how and technologies and establishing joint ventures in Russia," he says. "On the other hand, we don't want to see too many companies coming to Russia only to purchase assets."

He adds, "We want transparent investment to come to the Russian service sector. We don't like monopolies; we want a fair, open and competitive environment."

The overall value *of the [Russian] service market…has yet to match that of its Western counterparts.*

Examples of local exciting players abound. Geokosmos creates and supplies 3-D terrain and engineering structures models and large-scale digital topographic maps, allowing the precise 3-D visualization of terrain as well as structures over it, even complicated ones like oil and gas treatment plants.

Meanwhie, Geophysical Data Systems (GDS) is a seismic-data-processing software developer established 13 years ago. Its Interactive Statics Technology product allows quick and easy processing of data, notably in difficult terrain. GDS has also worked with major clients in the Gulf and in the CIS region. Yet the Russian market seems to be ample enough for Alexander Zhukov, managing director.

"A few years back, we were actively seeking customers around the world—in Canada, Saudi Arabia and others—but since then, the volume of work with Russia has picked up, and has provided us with enough work to keep our company and our people totally busy," he says.

"Today, with the announced conversion of exploration licenses into production licenses, we see a good stimulant for the development of exploration activities, and for our products."

Another example of technical excellence is INEF, a Moscow firm that has developed equipment and techniques for the acoustic rehabilitation of wells and beds, allowing increased yields from boreholes previously partially clogged.

The company has recorded commercial successes in Russia and in the Caspian region, increasing yield in up to 1,500 wells in more than 50 fields both in Russia and abroad, producing in excess of 2.5 million tons of additional oil from wells that were suffering structural damage. Building on these successes, INEF is now looking at other opportunities to expand its sales and to invite an investor to give it a second breath of life at a time when depleted fields, old oil wells and damaged structures are boosting commercial value more than ever across the former Soviet Union and beyond.

"Our technology will be very popular tomorrow with small and medium-size companies, as it is cheap, easy to deploy and produces fast results," says Isaak Orentlikherman, INEF chief executive. "We are ready to collaborate with possible partners, as we believe this technology has a strong commercial future."

Growth potential

This example illustrates the sort of potential still to be revealed by the Russian service sector, from the largest players to the smallest, offering niche investment and other forms of partnerships opportunities. With only 30% of the sector to be considered as "open" generating up to $3.5 billion of revenue, the potential for future growth is enormous and the appetite for development by local companies is real, and today more than ever built on solid credentials.

The sector also remains firmly anchored at the heart of a major hydrocarbon region, also promising plenty of future developments provided Eastern Siberia, the Arctic North and the most promising parts of the Russian shelf keep their promise. The balance of activity development should be provided by the use of enhanced-oil-recovery techniques and the unrivalled construction of groundbreaking infrastructures like the giant pipelines being planned. For those lucky enough to service this growth, the sky will be the limit. □

Framing Perceptions

Consideration of a new law involving Russia's protection of its greatest-potential assets has piqued the interest of Russian E&P investors.

Four years ago, the debate about the legal system framing E&P activities was centered on production-sharing agreement (PSA) laws. Some leading voices, including jailed Yukos chairman Mikhail Khodorkhovsky, deemed the law detrimental to the nation's interests and too favorable to foreign companies.

The law was scrapped, triggering the ire of foreign investors, and only the agreements signed between the state and the foreign majors involved in the Sakhalin 1 and 2 and Kharyaga projects were "grandfathered."

Today, there are rumors of the possible revival of PSA legislation to facilitate the development of the next generation of mega-projects on the Arctic shelf and elsewhere, but the focus of the industry is elsewhere. Everyone is waiting on the forthcoming new subsoil law, which is expected to come into force by the end of the year to replace one deemed out of date and ill-adapted by the industry.

Drafts of the law have been circulated, dispositions have been leaked and some of its provisional content has caused alarm among the international oil and gas community, as well as among many of its Russian counterparts. The an-

For Andrey Goltsblatt, "it is time to take Russia seriously."

nounced intention to limit access to underground mineral wealth considered "strategic" (affecting many industries beyond hydrocarbon extraction) without a clear definition of what that term encompasses, sends shivers down the spines of many executives from the nickel, gold, diamond and, most importantly, the oil and gas sector. Failing to clarify this point, Russia will send the wrong signals to the global oil and gas sector at a time when cooperation is required to develop the next generation of mega-projects.

Meanwhile, other dispositions of the draft law, notably one calling for restrictions of access to foreign capital, with the necessity for companies involved in mineral extraction to be 50% Russian, added a great deal of confusion to an already worrisome situation.

Other areas of uncertainty also appear, regarding the use of a double or of a simple key approach, i.e. giving authority over the licensing processes to both the federal government and regional institutions. Today's mineral law is based on a double-key approach, and regions have been wary of announced changes, which might reduce their considerable leeway on mineral extraction activities as well as financial returns.

Yet, the draft law also contains dispositions that have been hailed as progressive by most. Rights of minerals development by a company that has conducted geological exploration work will certainly reassure most of the oil and gas industry and ease investments into difficult assets. It should also increase the number of greenfield exploration wells that have fallen to an all-time low in the past two years.

Everyone is waiting *on the forthcoming new subsoil law….*

The easing of license-transfer procedures should also provide the industry with more flexibility and should in turn boost activity, providing further incentives to foreign operators to seek opportunities.

Beyond the subsoil law, which should durably reshape the sector in the years ahead, there is much work to be done to strengthen the Russian legal system and ensure that the courts are independent and fair, and are being given the means to render justice efficiently and with consistency. The regional courts notably need to see their work facilitated for the rule of the law to be strengthened.

There are plenty of legal challenges to be addressed by the Russian Federation, and these are testing times. Andrey Goltsblat, senior partner at Pepeliaev, Goltsblat & Partners, a Moscow practice very involved in the industry, says, "In recent years, Russia has been hesitating between different courses of action, different directions. Today, its course seems defined but it needs to mark it out more clearly for the outside world, to stop misreading and misunderstanding its true intentions and take Russia seriously."

The future subsoil law provides Russia with just such an opportunity to set the record straight and eliminate its old nationalistic and protectionist demons once and for all. The debate raging around this new law should be an honest, cooperative multilateral and constructive one.

It is the right time in the country's recent history to proclaim its intention to be a genuine partner, open and friendly, looking at making the best use of its subterranean wealth, for the sake of its future. □