IHS QUARTERLY

COUNTRY RISK



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Kirsten Parker Senior Director **IHS Country Risk**



VISION

Capturing the complexity of risk

Welcome to IHS Quarterly/Country Risk, the new look of Country Risk Quarterly, which as always aims to present significant insights and foresight that give global businesses an edge in managing risk. This issue explores the complexity and key drivers of emerging country risks, using a variety of new analysis techniques and innovative forecasting methodologies.

Complex data drawn from many sources are transformed into clear risk forecasts. Our "All Source" Open Source Intelligence (OSINT) fusion model is designed around collection plans, in which we identify potential indicators of change. These indicators enable a structured approach to data collection, including geospatial intelligence (GEOINT), imagery intelligence (IMINT), social media intelligence (SOCMINT), and expertise from analysts and human intelligence (HUMINT). In this era of "big data" and information overload, visual representations of the fusion of these data sets – influence maps, decision and process timelines, geospatial analytics, and sentiment analysis – allow us to test hypotheses and discover critical insights. This reveals scenario pathways to watch and enables transparency on the level of certainty in the forecasts.

In the Islamic State article on page 14, we demonstrate the value of OSINT in fast-moving conflicts. This gives us a view into Islamic State command and control structures, recruitment strategies, military capabilities, and relations with other armed non-state groups. This, in turn, helps us forecast where Islamic State is consolidating control and likely to move next.

On page 18, we examine maritime dispute scenarios in the South and East China Seas through the lens of a variety of indicators for escalation or deescalation, and the potential implications for business and security in the region. Indeed, even businesses without direct exposures in the disputed islands and waters of Xisha/Paracel, Nansha/Spratly, and Senkaku/Diaoyu would be at risk of onshore operational disruption and collateral damage to maritime shipping in the event of armed conflict.

Our cover story on page 8 examines the diversity of risks global businesses face as Mexico opens its hydrocarbons market to foreign development in a historic regulatory change. We consider how these regulatory frameworks may be affected by co-ordination and capacity constraints, and the need to negotiate with local communal landowners, labour unions, environmental activists, social groups, and opposition parties. This mapping of influence and decision processes provides insight into areas of relative risk and opportunity in a changing commercial landscape.

Analyzing the complexity of risk is what IHS Country Risk does every day. Clearly communicating the implications is our business.

IHS QUARTERLY

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MEXICO IS OPEN FOR BUSINESS

State-owned PEMEX's monopoly of Mexico's oil and gas market is over. The doors are now open for foreign companies to access the country's hydrocarbon resources, including offshore oil and gas, and onshore shale. Alongside the opportunities come new challenges and risks. By Carlos Cardenas and Ford Tanner

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ISLAMIC STATE ON THE MOVE IN SYRIA

The nature of analysis is changing as the conflict evolves. Data-driven analysis provides essential insight to help make sense of the complex risk environment through a combination of geospatial intelligence, social media monitoring, and Open Source Intelligence tools.

By Columb Strack

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RIVALS ON THE SOUTH AND EAST CHINA SEAS

For more than 25 years, peace has held in the South and East China Seas, although no fewer than seven countries lay claim to disputed islands in the region. Recent maritime confrontations indicate there is a risk of escalation and point to a few potential conflict scenarios.

By David Yang

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NUMBERS

FIVE METRICS THAT MATTER Source: IHS Country Risk P 22

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INSIGHTS

Risks rise over Philippines' anticipated mineral ore export ban

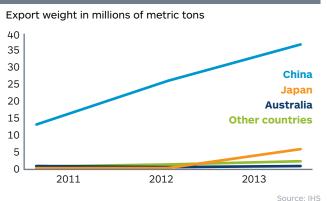
Recent legislative moves by Philippines' Congress to ban unprocessed mineral ore exports point to increasing risks for companies operating in the country's mining sector. Depending on its exact conditions, a ban on mineral ore exports would be likely to create export restrictions and heighten the risk of existing mining contracts being reviewed as the government seeks to prioritize domestic processing.

In early September, a committee in the lower house of Congress approved a bill seeking to ban unprocessed mineral ore exports. The bill was set to move to the full lower house of Congress, although no timeline for its debate and approval had been announced at press time (1 October 2014). If implemented, the bill would require companies to process all minerals extracted in the Philippines before export.

The proposed bill reflects the Aquino government's plans to remodel its mining policy to include enhanced environmental protection, human rights, and increased revenue from mining companies through higher excise taxes. With the country's unexploited mineral wealth estimated to be worth USD840 billion, as claimed by Philippines' National Economic and Development Authority in 2008, mining is considered to be a key future growth sector. As such, the government is eager to guarantee the sector's long-term viability and the livelihoods of the local population.

The counterpart bill was introduced in August in the upper house Senate by Senator Paolo Benigno Aquino, President Benigno Aquino's cousin and a member of his ruling Liberal Party, who is seeking to create more value for the domestic mineral sector. The bill has also received backing from Environment Secretary Ramon Paje, who said the Philippines should move towards the stance taken by Indonesia, as the country was at a financial disadvantage if it continued to ship raw ore. Indonesia's ban on the export of unprocessed minerals came into effect in January 2014, blocking nickel ore exports.





Yet, the full application of any ban on exporting unprocessed minerals is likely to take years and would probably be accompanied by exemptions, as in Indonesia. On September 9, Congressman Erlpe John Amante, who advocates the proposed law, said that miners would be likely to get a five-year grace period before mandatory domestic processing took effect after the proposed bill was passed.

If implemented as planned, the ban would negatively affect companies exporting unprocessed nickel to China from the Philippines and, potentially, manufacturers worldwide using Chinese stainless steel if supplies are reduced or prices escalate. Following Indonesia's export ban, the Philippines replaced it as the largest supplier of nickel ore to China, making up 61% of shipments in 2014. For its part, China is the world's biggest user of nickel for stainless steel production and the top stainless steel manufacturer.

By Maria Harrison, senior analyst, Asia Pacific, IHS Country Risk



For more information, visit ihs.com/QCR14Philippines

Early warning essentials

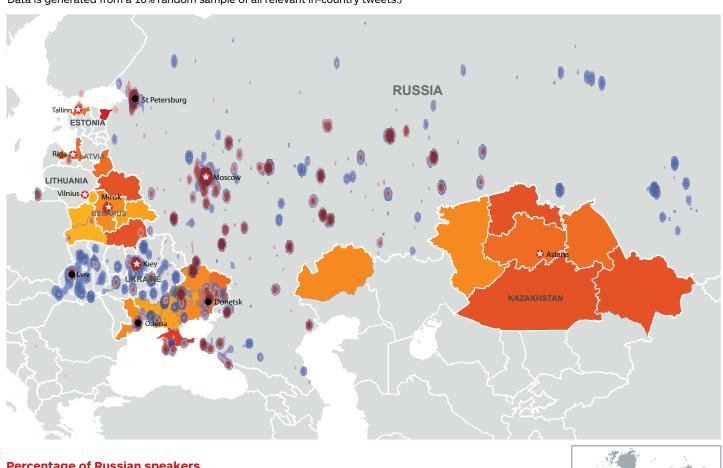
The Baltic states, Belarus, and Kazakhstan are potential flash points within Russia's sphere of interest. Sentiment analysis of geocoded tweets fused with social unrest event indicators provides an essential early warning for governments and businesses should separatist movements gain momentum.

The annexation of Crimea heralded a renaissance of Russian nationalism, and the subsequent separatist movement in eastern Ukraine, accompanied by rhetoric around 'Novorossiya' (New Russia), has raised the specter of Russian intervention elsewhere. The Baltics and Kazakhstan stand out as regions containing large ethnic Russian minorities that could be mobilized along the lines of the pro-Russian separatists in Ukraine. Although Russia is unlikely to undertake direct military action at this stage, particularly in countries that are NATO

members, it will be important to monitor any indications that local populations are becoming organized according to nationalist sentiment. For instance, in April, the Russian parliament introduced simplified procedures for the adoption of Russian citizenship by Russian-speakers abroad. More recently, on 13 September, Russia's foreign ministry spokesperson on human rights stated, "We will not be tolerant of creeping aggression against the Russian language we are observing in the Baltic states."

1 HOTSPOTS OF SENTIMENT

The map shows a dataset of geo-tagged tweets from January-August 2014 that reflect positive or negative sentiment towards pro-Russian separatists in eastern Ukraine and towards Ukraine's Maidan movement, which led to the overthrow of the government in Kiev in February. Visualization of this data provides insight into the level of potential local support for and against Russian intervention beyond Ukraine. (Dataset limitations: Twitter users in authoritarian countries such as Kazakhstan are less likely to enable geo-tagging due to fear of detection. Data is generated from a 10% random sample of all relevant in-country tweets.)



Percentage of Russian speakers

<10% 10 - 20% 20 - 30%

Hotspots

Pro-Maidan geocoded tweets Pro-Russian geocoded tweets

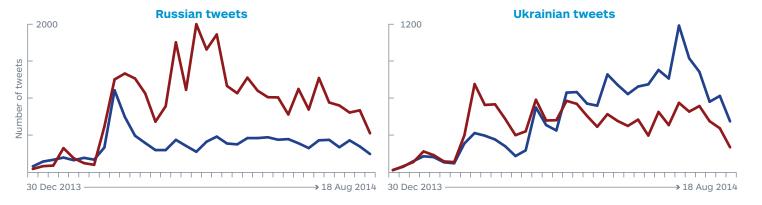


Pro-Russian Pro-Maidan

INDICATOR EVENTS (2014) KAZAKHSTAN LATVIA **ESTONIA LATVIA**

SEPARATIST SENTIMENT WATCH

The graph shows the evolution of sentiment tweets over time towards the pro-Russian separatists and the Ukrainian Maidan (essentially pro-European) movement. In May, Ukraine relaunched military operations in the east, and in July, an Antonov AN-26, followed by MH17, was downed. This type of visualization captures the ebb and flow of public support for the separatist cause. In the case of the Russian public, this could be a factor in determining the Kremlin's appetite for further intervention abroad. Surveys conducted by the Levada center, Russia's foremost pollster, have shown that although Putin has received high approval for his actions so far, Russians are markedly less supportive of direct military intervention.



SPOTLIGHT ON KAZAKHSTAN

Putin's controversial public remarks on 29 August, that "the Kazakhs never had any statehood" prior to the country's independence under President Nursultan Nazarbaev, echoed the commonly held Russian attitude to Ukraine. Northern Kazakhstan is home to many ethnic Russians, forming up to 40% of the population in the Akmola, Eastern Kazakhstan, Kostanay, Northern Kazakhstan, and Pavlodar regions. Also, a number of organizations represent the Russian diaspora, such as the Union of Cossack Social Associations of Kazakhstan, Russian Community of Kazakhstan, and Republican Popular Slavic Movement. Although IHS forecasts a low risk, the scenario of Nazarbaev's sudden death, followed by a chaotic succession in which strong nationalist forces come to power and implement measures to constrain Russian-speaking minority rights, would be the most likely trigger of a separatist movement and potential Russian intervention.

Indicators of an emerging separatist movement in northern Kazakhstan would include:

- Increasing adoption of Russian citizenship by the Russian population of northern provinces
- Emergence of political parties or movements (akin to Russian Unity in Crimea) explicitly advocating northern region secession, supported by organizations representing the Russian diaspora
- Separatist campaigning in social media and on blogs, re-broadcast by Russian news agencies
- Statements by top Kremlin officials or spokespeople drawing attention to human rights abuses of ethnic Russians in Kazakhstan
- Paramilitary units formed of members of existing Cossack groups
- Permanent protests (tent cities) by government buildings in predominantly Russian-populated cities: Kostanay, Pavlodar, and Petropavlovsk.

Mexico is open for business

Amendments to Mexico's Constitutional Articles in December 2013. and approval of energy-related secondary legislation in August 2014, legally ended state-run PEMEX's 76-year hydrocarbons monopoly. Opening the sector will grant investors access to new business prospects across a largely untapped resource potential, including deep-water plays within the Gulf of Mexico, offshore gas, onshore shale, and marginal proven undeveloped reserves in conventional areas. Alongside increased opportunities that come with sector expansion, however, will emerge new challenges and risks.

By Carlos Cardenas and Ford Tanner



exico's Ministry of Energy (Secretaría de Energía) expects the new regulatory changes to attract USD50.5 billion in foreign direct investment between now and the end of President Peña Nieto's term in 2018. Between November 2014 and May 2015, the National Hydrocarbons Commission (Comisión Nacional de Hidrocarburos: CNH) will carry out the first bidding round (Round 1) for exploration and production contracts. Petróleos Mexicanos (PEMEX) will be allowed to migrate directly awarded areas towards partnerships with independent firms by late 2014 or early 2015.

The changes to the sector are historic and represent a major political victory for the president, who, along with his ruling Institutional Revolutionary Party (Partido Revolucionario Institucional: PRI), is pushing to ensure that the new hydrocarbons regulatory framework is rapidly, and adequately, implemented. There is a moderate risk of implementation being slowed or even reversed if the Supreme Court validates a referendum petition (the country's electoral institute still needed to validate the signatures sponsoring the petition at the time of writing) the opposition Party of the Democratic Revolution (Partido de la Revolución Democrática: PRD) has raised against the sector's opening.

The new regulatory framework

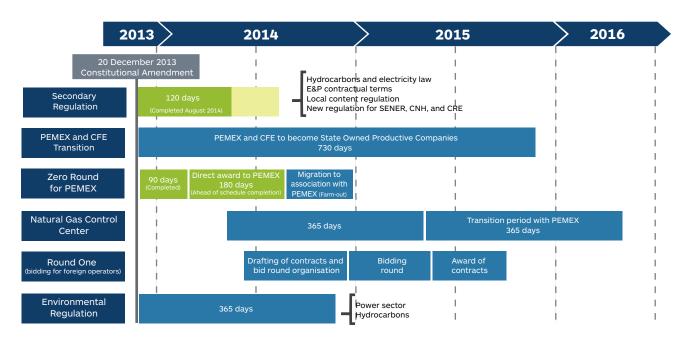
One of the most important features of the new framework is that international oil companies (IOCs) will no longer have to work exclusively alongside PEMEX under a service-based contract model, where remuneration is solely in cash. The possibility of awarding services contracts will remain, but there will also be profit-sharing agreements, production-sharing contracts, and licenses. IOCs will have access to most of the areas featured on the map (see "First Rounds for new acreage" on page 11). The government has already assigned some of these to PEMEX and determined which others will be offered in the first tender (Round 1).

Challenges ahead

Although the regulatory changes will provide many opportunities for IOCs, those investing will likely encounter a business environment in transition and challenges, which include capacity constraints in new regulatory bodies, risk of poor co-ordination between them, the need to negotiate surface rights with local communal landowners, and labour unrest.

Implementation process to last into 2016

Timeline for opening the hydrocarbons sector



Source: IHS

1. Capacity constraints within regulatory agencies

Regulators face a steep learning curve as they transition from monitoring only PEMEX for the past 70 years to overseeing a new and more complex industry. The starting point is not ideal, with considerable organizational, decision-making, and institutional efficiency challenges. These could well be complicated in the rapid transition to the planned new regulatory framework.

CNH is an independent agency charged with providing technical oversight and regulation for Mexico's entire upstream industry. The diversity of Mexico's upstream plays (ranging from conventional and unconventional onshore to shallow and deepwater areas), combined with the anticipated upsurge in exploration and production activity, will make fulfilling its mandate difficult.

In February 2014, the head of CNH, Juan Carlos Zepeda Molina, admitted that budgetary constraints were hampering the institution's supervision, analysis, and information-gathering capacity. Indeed, CNH's 2014 budget totaled just USD5.7 million. Peers such as Brazil's National Petroleum Agency (Agência Nacional do Petróleo, Gás Natural e Biocombustíveis: ANP) and Colombia's National Hydrocarbons Agency (Agencia Nacional de Hidrocarburos: ANH) had budgets of USD2.8 billion (2013) and USD1.47 billion (2014), respectively. In terms of personnel, CNH employs 130 staff, compared with ANH's 156 (in mid-2012) and ANP's 800 (more than half of whom are engineers, geologists, and economists selected via rigorous public examinations). This weak institutional capacity and likely skills deficit will probably cause operational bottlenecks unless the government allocates significant resources to strengthen CNH.

Similar capacity constraints are likely in the new regulatory agency overseeing industrial security and environmental issues for hydrocarbons. It will probably be expected (political pressure) to expedite approval for environmental impact assessments to ensure swift implementation of the new regulatory framework. However, this could generate bottlenecks and important environmental omissions. Other countries such as Colombia, which have greater experience and expertise dealing with IOCs, have struggled to speed up awarding environmental permits because of a lack of personnel and resources. Environmental matters

will clearly be sensitive. An accident or spill such as the Deepwater Horizon incident, or even the much smaller Frade field spill in Brazil, would almost certainly generate a political backlash against private companies. This happened in August and September 2014 when members of the PRI called for the cancellation of Grupo Mexico's mining license after a toxic spill in Sonora.

2. Co-ordination problems and political interference risks

Oil contributes approximately 33% of the federal budget and will continue playing a key role in Mexico's economy. Government ministries' involvement in overseeing the sector will help add some capacity to the regulatory institutions. Such support, however, will increase the risk of politicians influencing decisions on technical matters and complicate co-ordination in each entity.

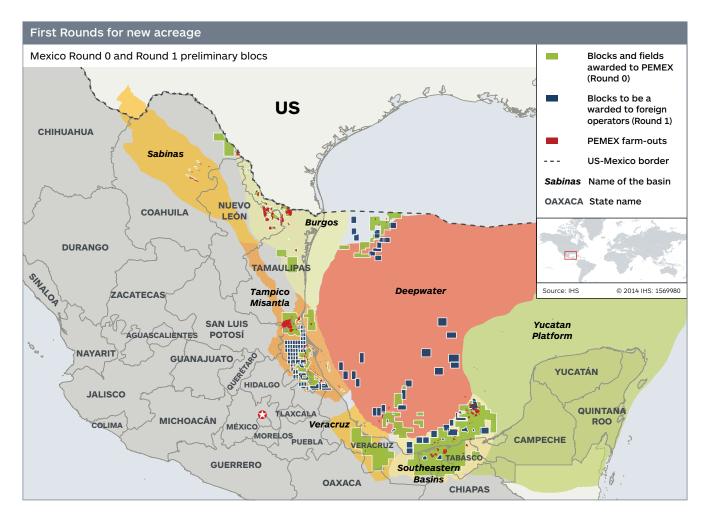
The process of drafting, awarding, and overseeing contracts shows the extent of ministries' influence and redundancies. For example, the Ministry of Public Credit and Finance (Secretaría de Hacienda y Crédito Público: SHCP) will draft each of the contract's fiscal and economic terms, while SENER will write the rest of the contract. SENER will also determine the contract type offered for exploration and production. Both SENER and SHCP have key roles in designing technical guidelines and terms for public tenders. However, CNH will organize and launch those tenders.

The Ministry of Economy will be in charge of defining, setting up, and monitoring the industry's local content requirements. It will notify CNH, which will have punitive powers for local content violations. Mexico does not have a "national champions" policy like Brazil when it comes to local content requirements. However, the Ministry of Economy's influence here increases the risk of future policy revisions and of political priorities minimizing CNH's influence over local content matters.

Disagreements and rivalries will likely emerge between these overlapping institutions, especially over sensitive matters related to hydrocarbon revenues, developing key areas or issues that might involve the participation of PEMEX in strategic areas. Peru, Colombia, and Brazil have had similar co-ordination problems.

3. PEMEX as a counterparty

Opening the oil industry will force PEMEX to operate in a more competitive environment, with the



government aiming to transform it into a productive state enterprise conforming to high industry and corporate governance standards. The new regulatory framework has elements that will support PEMEX in reaching those standards. These include granting budgetary autonomy and the state's absorption of a percentage of its labour liabilities, both measures that will grant the company financial respite and decisionmaking autonomy.

However, transforming PEMEX will be a long-term undertaking. The government will rely heavily on its revenues until 2027, straining the company's finances. PEMEX will still need to pay an annual dividend to SHCP equivalent to a minimum 30% of after-tax earnings from the 2016 fiscal year. In the 2021 fiscal year, this will drop to at least 15%, and to 0% in the 2026 fiscal year. This could continue to hamper the company's exploration and production activities. There is a risk of the government pressuring SENER and CNH to give a prominent role to PEMEX during competitive bid rounds.

Furthermore, there is a high risk of bottlenecks associated with centralizing PEMEX's procurement process, which seeks to merge the company's 100-plus purchasing centers into a single entity. Centralizing procurement approval processes at Brazil's Petrobras and Venezuela's PDVSA led to bottlenecks and associated project delays.

4. Obtaining superficial land rights

Approximately 53% of Mexico's territory (105.9 million hectares) belongs to agricultural workers and farmers who have associated themselves under Ejidos (communal landowning units); there were 31,514 Ejidos by 2007. The Ejidos overlap with areas where there are untapped hydrocarbon resources, especially in Veracruz, Tamaulipas, and Coahuila. While the state owns the hydrocarbons and minerals located in the subsoil, the Ejidos own the superficial, or surface, rights. This means that IOCs will need to negotiate rights of passage, land leases, and land purchases with communal landowners before setting up operations or mobilizing equipment and personnel.

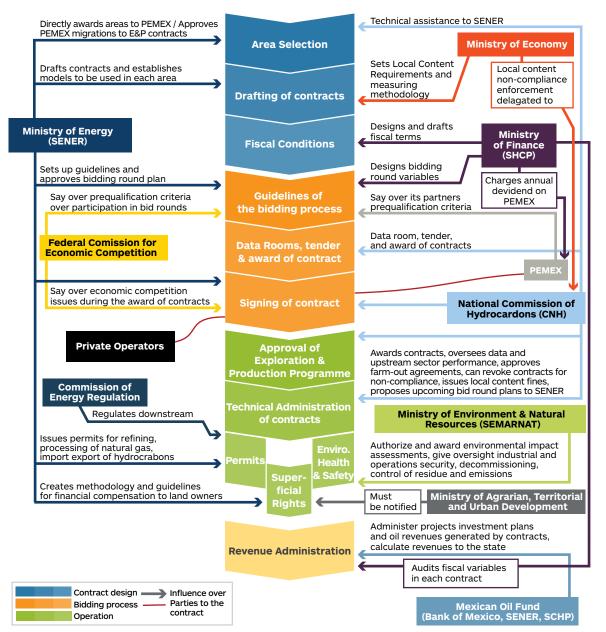
Mexico's new Hydrocarbons Law states that private companies will be responsible for negotiating the purchase or lease of Ejido territory. Therefore, before and during negotiations, IOCs are likely to have to:

- Identify whether one or more Ejido(s) has surface land rights where the company wants to base its operations.
- · Identify the Ejido leadership and spokespersons to negotiate land leases and purchases.
- Determine whether there are unsettled delimitation issues within adjacent Ejidos, or any other issues that might jeopardize negotiations.
- Accommodate multiple actors' demands.

Local Ejidos leaders may have different ideologies, political preferences, economic ambitions, environmental and social concerns, or external pressures (such as from organized criminal gangs). These could complicate direct negotiations, with

Co-ordination challenges between regulatory bodies

Influence map of ministries, commissions, and companies



Source: IHS

some choosing to sell their land while others favor lease agreements. Additional monetary compensation will be necessary where projects are declared commercially viable. In such cases, the Ejido must receive from 0.5% to 3% of annual after-tax project revenues for non-associated natural gas projects and 0.5–2% of annual after-tax project revenues for any any other type of hydrocarbon project.

5. Dealing with local communities

Environmental activists and local groups typically protest against PEMEX over issues ranging from water contamination, oil spills, and pollution, to demands for social investments and compensation. Local communities in Tabasco, for example, blocked access to several PEMEX wells for months, demanding compensation for an oil spill. PEMEX's CEO, Emilio Lozova Austin, said in July 2014 that blockades at the Terra field were costing USD3 million in revenue per day. PEMEX has previously encountered smallscale discontent from local communities in Tabasco, Veracruz, Campeche, Oaxaca, and Guerrero. IOCs venturing into onshore projects alone will face much higher risks of community unrest disrupting their operations than those partnering with PEMEX. They may also find it harder to gain access to superficial land rights.

6. Union unrest

The Syndicate of Petroleum Workers of the Mexican Republic (Sindicato Nacional de Trabajadores Petroleros de la República Mexicana: STPRM) has no history of conducting major strikes against PEMEX. Many of its members, including its president, are also members of the PRI. The union will maintain its benefits, but its restructuring entails early retirements, a freeze on hiring subcontractors, eliminating absenteeism, and a gradual transition towards becoming an industry union, rather than a union exclusively working for PEMEX. The STPRM's five representatives have been removed from PEMEX's board as a result of the energy reform legislation.

Private firms will not be forced to hire STPRM members exclusively, but are likely to face pressure to do so when running projects alongside PEMEX. Unions operating with subcontracted personnel in blocks where PEMEX is absent risk facing labour demands and unrest from workers wanting similar conditions to those PEMEX offers. As cases in Colombia (oil) and Chile (mining) illustrate, non-unionised subcontracted workers are

typically the most militant, as they usually demand the same generous benefits the national company offers.

7. Political opposition from a weakened left

The PRI is currently Mexico's most powerful and influential party. A September 2014 opinion poll (Consulta Mitofsky) gave President Peña Nieto a 47% approval rating. This, coupled with a strong PRI showing in the June 2015 mid-term elections could lay the foundations for successive terms in office. A PRI re-election in the 2018 presidential contest, or a victory by the pro-energy reform National Action Party (Partido Acción Nacional: PAN), would signal the likely preservation of the new hydrocarbons regulatory framework through the next decade.

The PRD represents the Mexican left and has been weakened by divisions and low representation in Congress. It is still refusing to concede defeat over its opposition to opening the hydrocarbons industry to private participation, however. On 3 September 2014, the party submitted a petition with 2.3 million signatures to the Lower House to initiate a referendum process (known as Public Consultation in Mexico) against the opening. The PRD-sponsored petition generates a moderate risk (the country's electoral institute still needed to validate the signatures as of 1 October 2014) that the new regulations will be slowed or even reversed, which would increase should the Supreme Court validate the petition and then rise further if polls began to indicate public rejection of the energy reform ahead of a potential referendum, which could be held in June 2015. Any official Public Consultation would delay opening the sector by default. It could, though, also give the president the chance to weaken any political opposition to his energy policies if he secured over 55% support.

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For more information, visit ihs.com/QCR14Mexico



Islamic State on the move in Syria

Islamic State activity in Syria is evolving and the nature of conflict analysis is changing. Data-driven analysis provides essential insight into the direction of this fast-moving conflict. A combination of geospatial intelligence, social media monitoring, and Open Source Intelligence (OSINT) tools can be used to track Islamic State's operational activities, capabilities, and range of influence, providing early indication of emerging patterns in this fluid, complex risk environment.

By Columb Strack

ver the past nine months Islamic State's geographic control has grown and the share of activity directed against each of the major opposing alliances has shifted. Analyzing the data reveals clear strategic and tactical objectives and provides insight into the group's likely evolution.

From January to September 2014, Islamic State has been most active around Aleppo and in Deir al-Zour and Raqqa provinces, indicating that its priority has been to isolate Syria's second city and secure its base area in

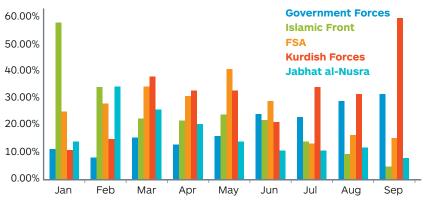
Raqqa and the Euphrates valley, from where it launched its June offensive into northern Iraq.

The single area in Syria where most incidents have occurred involving Islamic State has been Aleppo province, where the group has focused on denying access to the Turkish border to rival insurgent groups and to Kurdish separatists (see figure on page 16).

Over the same period, the next most active provinces for Islamic State have been Deir al-Zour and Ragga in

Islamic State fighting has shifted from rival Sunni insurgents to Kurds and the Syrian Army

Activity by opponent, 1 January to 22 September 2014



Note: Percentages do not add up to 100, due to overlap when opponents cooperate against Islamic State. This primarily affects the Islamic Front, Free Syrian Army, and Jabhat al-Nusra.

Source: IHS Country Risk

eastern Syria, where the group has been consolidating its secure base area, progressively eliminating the remaining isolated government garrisons and establishing a 'caliphate' (a state under Islamic law ruled by a caliph) based on Raqqa. Control of this secure area bordering Iraq enabled Islamic State to launch its June offensive into northern Iraq, backed by Iraqi Sunni insurgents/tribes hostile to the Baghdad government.

The data shows that there has been a significant decline in the share of fighting between Islamic State and rival Sunni insurgents over the past nine months (see figure above). Only around 15% of Islamic State activity in September was directed against groups affiliated with the Free Syrian Army, Islamic Front, and Jabhat al-Nusra, down from 80% in January. This suggests that there is now little resistance from other Sunni factions in areas under Islamic State control.

The physical separation of Islamic State base areas in the Euphrates valley from the main concentration of government forces in southern and western provinces enabled the group to focus on achieving dominance over its rivals.

Islamic State will most certainly need to hold on to Ragga, and other urban centers in the Euphrates valley, to retain the credibility of its 'caliphate'.

Since its declaration of a caliphate on 29 June 2014, Islamic State has significantly increased its efforts to capture outright residual Syrian Army garrisons in areas it controls, often using weapons seized from the Iraqi Army. The dataset shows that instances of Islamic State fighting against government forces increased from an average of 13% of its overall activity in the first five months of 2014 to more than 30% in September.

What you need to know

Recent OSINT analysis from September 2014, reveals how Islamic State's offensive in Syria is evolving.

Islamic State's almost immediate redeployment of heavy weaponry captured from Iraqi Army depots to Syria, particularly US-made M198 howitzers, indicates that Syria is the group's current main effort.

Aleppo province has consistently had the highest concentration of Islamic State fighting. This indicates that a key objective throughout has been to isolate Syria's second city and deny access to the Turkish border to rival Sunni insurgents and Kurdish separatists.

Deir al-Zour and Ragga in eastern Syria have been the next most active provinces for Islamic State. This is where the group has been consolidating its secure base area along the Euphrates, by capturing residual Syrian Army garrisons, and establishing a 'caliphate' based on Raqqa.

Only around 15% of Islamic State activity in September was directed against groups affiliated with the Free Syrian Army, Islamic Front, and Jabhat al-Nusra, down from 80% in January. This suggests little resistance from other Sunni factions in areas under Islamic State control.

Geospatial intelligence, social media monitoring, and OSINT tools

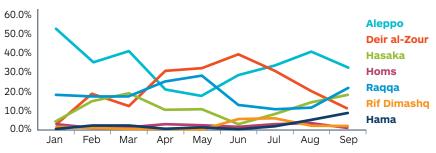
Since late 2013, IHS Country Risk has been building an extensive dataset for the conflict in Syria, comprising more than 10,000 manually geocoded indicator events, as well as information on more than 2.000 insurgent factions and their armed capabilities. The data is sourced daily from Open Source Intelligence (OSINT): a range of local news providers, official websites, our network of human sources, and social media accounts, around 80% of which have been systematically rated for value and reliability.

Using this data, we have generated a province-level map of Syria that shows a snapshot of territorial control for each of the major alliances as of 22 September 2014, a day before US-led coalition airstrikes against Islamic State and Jabhat al-Nusra's Khorasan group began. An area is defined as 'controlled' if our latest information indicates that a particular group is holding defensive positions, or is clearly the dominant force in that area.

Recently, Islamic State has been successful in Raqqa province, from which the last Syrian military presence was removed by the capture of Tabqa airbase on 24 August 2014. Government forces have since been under siege from Islamic State at all three of their remaining bases in Deir al-Zour city, Hasaka city, and Qamishli.

Islamic State activity has been concentrated in Aleppo, Deir al-Zour, Raqqa, and Hasaka provinces





Source: IHS Country Risk

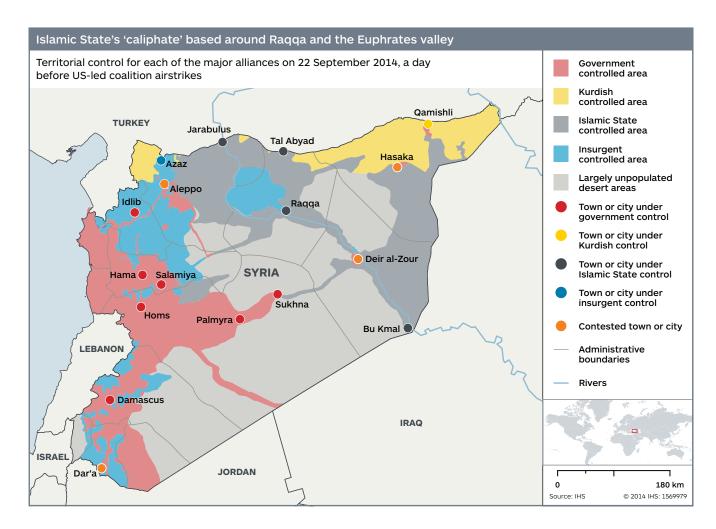
Islamic State capabilities

Islamic State and other factions regularly post images and videos of their operations on social media, providing detailed insights into the equipment and tactics they employ, as well as the movement of particular weapons systems. For instance, videos posted on social media showed US-made M198 howitzers and other heavy weaponry captured from Iraqi Army bases that were almost immediately redeployed to Syria. Not only does this suggest that Islamic State's operational priorities are in Syria rather than Iraq, but it also demonstrates that the group can switch resources between its Iraq and Syria fronts at will across what it regards as an irrelevant border.

Despite capturing large numbers of Soviet-era tanks and other armored fighting vehicles (AFVs), including US-made Humvees, these have not been seen to play a major role in offensive operations. Islamic State probably lacks the numbers of serviceable AFVs to concentrate armor to best effect. Instead they are used individually in platoon or company level attacks to deter enemy resistance, or in a static defense role.

Social media sources indicate that Islamic State possesses small numbers of FN-6 MANPADS. However, the group has so far relied largely on 23mm ZU-23 and 57mm AZP S60 anti-aircraft guns, neither of which are effective against modern fighter aircraft.

Other technical capabilities, seen on social media imagery and videos, include the use of aerial photography drones. IHS believes Islamic State used these to plan its successful offensive on Tabqa Airbase in August. There are also social media claims that they have been used to direct mortar fire from beyond the line of sight.



Islamic State going forward?

Under the pressure of US-led coalition air strikes in both Iraq and Syria, Islamic State risks losing the initiative it has held since its offensive into Iraq and the declaration of a caliphate in June. However, if the group can survive sustained airstrikes without irreversible degradation of its command and control, logistics, and maneuver forces, there is currently no ground force opposing it in Syria, other than the overstretched and otherwise committed Syrian Army, capable of evicting it and establishing control in its place.

Islamic State will most certainly need to hold on to Raqqa, and other urban centers in the Euphrates valley, to retain the credibility of its 'caliphate', even if it concedes ground of secondary importance in Iraq. Therefore, completely abandoning conventional operations in favor of a rural-based guerilla campaign is not likely to be a current option.

Although any plans for a conventional advance on the Syrian city of Homs or even Baghdad are probably now shelved, Islamic State will probably seek to regain the initiative by increasing pressure on the Kurds, taking further territory along the Turkish border, and closing its grip on approaches to Aleppo, while eliminating the remaining Syrian Army garrisons in Hasaka and Deir al-Zour provinces.

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For more information, visit ihs.com/QCR14Syria

Rivals on the South and East **China Seas**

For more than 25 years, peace has held in the South and East China Seas, although no fewer than seven countries lay claim to disputed islands in the region. However, recent maritime confrontations indicate there is a risk of escalation and point to a few potential conflict scenarios.

By David Yang

istoric disputes in the South China Sea over the Xisha/ Paracel and Nansha/Spratly Islands and in the East China Sea over the Senkaku/Diaoyu Islands have resulted in several maritime confrontations over the past few years.

While it is unlikely that the countries involved would intentionally seek broader conflict given their deep economic connections, any confrontation involving military rather than law enforcement vessels and aircraft would significantly increase the risk of escalation, intentional or otherwise. Furthermore, in addition to these maritime stand-offs is an increasingly powerful China intent on asserting the full range of its historical claims in the region, contributing to a longer-term

trend of increased escalation risk.

Although international investors are unlikely to be directly affected by escalations in these maritime disputes, there would be notable secondary impacts on their operations. These include contract risks in the event of trade sanctions between the disputants, civil unrest-related risks of personal injury and property damage arising from nationalist protests - especially in China and Vietnam - and collateral damage risks to maritime shipping in the event of armed conflict.

South China Sea

China claims most of the islets in the South China Sea, which are disputed by five other countries in the region. In particular, both the Paracel Islands and the Spratly Islands are claimed by Vietnam, while the Philippines also claims the Spratly Islands. At present, the Paracel Islands are under Chinese control, while the Spratlys are divided between China, Taiwan, Brunei, Vietnam, the Philippines, and Malaysia.

The area contains some hydrocarbon deposits, although US Geological Survey estimates indicate they are relatively modest. Fishery resources were once rich, but are now seriously depleted. Nonetheless, many interstate confrontations have occurred over fishing and resource extraction activities in the area. Between 8 April and 15 June 2012, Chinese and Philippine coast guard vessels were involved in a standoff over fishing rights at the disputed Scarborough Shoal, which ended with a Filipino

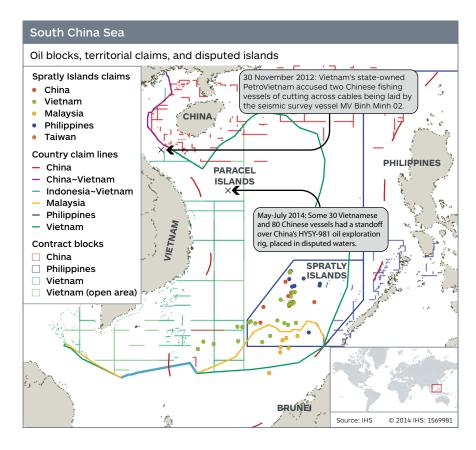
withdrawal. In May 2014, another major standoff involving more than 100 vessels took place between China and Vietnam, when China moved a deep-sea oil rig to disputed waters just off the Paracel Islands. China's decision to withdraw the rig from the contested waters on 16 July ended the standoff.

IHS assesses that a peaceful regional environment for domestic economic development remains the overarching objective for all and that armed conflict is unlikely within the next three to five years. In particular, a Sino-Filipino armed conflict is exceedingly unlikely at present because of the evident military imbalance.

However, despite military vessels not being involved in recent standoffs between China, Vietnam, and the Philippines, more frequent skirmishes are likely if the countries continue to conduct exploration activities within the disputed areas. Confrontations will become increasingly common near disputed features, and in particular contested oil blocks already under development or exploration (see map above right).

East China Sea

The Senkaku/Diaoyu Islands dispute was intensified in September 2012, when three privately owned islets were purchased by the Japanese government. In response, China launched regular air and sea patrols by paramilitary forces to the area that are ongoing, prompting repeated intercepts by Japanese combat aircraft and coast guard vessels. In an unprecedented step, China declared an Air Defense Identification Zone (ADIZ) covering the disputed islets in November 2013.



There are no hydrocarbon assets in the immediate vicinity of the disputed islands, and no major shipping routes, unlike the busy sea lanes in the South China Sea. Nonetheless, IHS regards this standoff to carry the highest escalatory risks among China's maritime disputes because of the regular involvement of military assets. Although Sino-Japanese relations have improved after the September resumption of maritime dialogues, suspended since 2012, escalation can be triggered by a miscalculation or an accident.

Escalation pathway scenarios

The following assessments consider hypothetical scenarios of conflict escalation in the South and East China Seas. The scenarios are meant to illustrate how a particular escalation pathway could potentially unfold and the associated risk indicators. They are not necessarily the expectations of IHS regarding future conflicts.

It is expected that the militaries involved would follow rules of engagement that allow the exercise of national self-defense in response to a hostile act or demonstrated hostile intent, using force that may exceed that of the threat. In the Chinese case, we assume that "selfdefense" extends to the defense of national commercial assets, based on Chinese media accounts of oilrig protection exercises, to include the use of deadly force.

It is important that all the indicators for increased escalation risk be interpreted in context. The presence of a single indicator does not necessarily mean that the likelihood of a given scenario has increased, nor does the entire list of indicators need to occur for a given scenario to become more likely.

Scenarios of conflict escalation in the South and East China Seas

1

Accidental escalation: MOST LIKELY

In general, increased air and sea activities in the disputed areas by either or both disputants would increase the risk of an accidental escalation, likely due to a misunderstanding between opposing forces held in a state of high readiness in close proximity. So, too, would the adoption of less restrictive rules of engagement by either or both parties.

Sino-Vietnamese: Nearly 100 Chinese and Vietnamese paramilitary vessels are locked in a standoff around a Vietnamese oil rig in Chinese-claimed waters. An approaching weather system forces some smaller Chinese vessels to withdraw. In their place, China dispatches a navy frigate. In response, Vietnam also deploys a frigate. The Chinese frigate locks its fire-control radar on the Vietnamese frigate. An inexperienced Vietnamese crew mistakenly believes an attack is under way. The Vietnamese frigate fires on the Chinese ship, which returns fire.

Sino-Japanese: A China Maritime Surveillance aircraft enters the airspace above the Senkaku/Diaoyu Islands. The aircraft is intercepted by a Japan Air Self-Defense Force (JASDF) combat aircraft, which orders it to turn back. As the Chinese aircraft begins to turn, it collides with a Japanese aircraft flying close by. In the confusion, the Chinese crew radios that it has been attacked and Chinese combat aircraft arrive to engage Japanese forces.

2

Miscalculation escalation: **LESS LIKELY**

Heightened nationalist agitation can limit the range of options considered feasible by political leadership and lead to risky decisions based on political expediency. Miscalculations resulting in unintended escalation are also caused by underestimating an opponent's resolve and overconfidence (indicated by dismissive statements by senior civilian or military officials). Likewise, periods of leadership transition increase risks, especially if the new leaders' foreign policy positions are not well established.

Sino-Vietnamese: China moves an oil rig into waters at the northern end of the Paracels. Given the rig's proximity to undisputed Chinese fields off Hainan and recent conciliatory high-level meetings, China had expected a mild Vietnamese response. Instead, Vietnam dispatches a paramilitary flotilla, hoping to force a withdrawal. Caught off guard and fearing damage to the rig, overwhelmed Chinese escort vessels fire upon a Vietnamese boat approaching the rig, prompting other Vietnamese vessels to return fire.

Sino-Japanese: An unmarked Chinese government vessel sails unusually close to a disputed island. The Japanese Coast Guard, fearing a landing party will be launched, surrounds the vessel. In an extraction attempt, Chinese navy ships cross into Japanese-claimed territorial waters. JASDF combat aircraft are dispatched, and lock firecontrol radar on a Chinese frigate prompting the frigate to open fire.

A deliberate attack: **LEAST LIKELY**

Escalation leading up to a planned attack would likely take place over a period of weeks. Indicators of an imminent, deliberate military attack include increasingly strongly worded government warnings regarding the use of military force, increased military reconnaissance and surveillance overflights, suspension of all bilateral exchanges, the expulsion of diplomatic personnel, general withdrawal of a country's civilian vessels from the disputed area, and widespread outbreak of nationalist protests and riots with tacit government sanction.

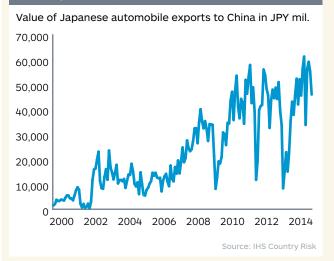
Sino-Vietnamese: China begins enforcing its annual summer fishing ban around the Spratlys. In response, Vietnam deploys navy warships to the area to protect its fishing fleet. A Chinese fishery enforcement vessel is sunk by a Vietnamese warship after it fires on Vietnamese fishing boats resisting arrest. In retaliation, China launches an airstrike against Vietnamese military facilities on Spratly Island.

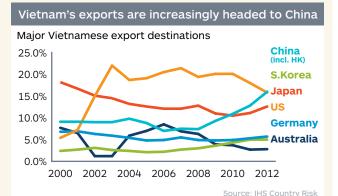
Sino-Japanese: An unlikely resurgence of Japanese nationalist sentiment brings in a hardline, conservative government, which moves to reinforce Japanese claims over the Senkaku Islands by beginning construction of a radar station on the main island. Chinese warnings that a permanent Japanese military presence on the islands will not be tolerated are ignored. In response, China launches a surprise airstrike against the radar station.

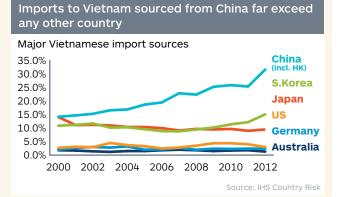
Risk implications of escalation

IHS assesses that direct military conflict between China and Vietnam, and China and Japan, remains unlikely. Nonetheless, a serious escalation could have material consequences even for parties not directly involved in the dispute.

China represents a major market for Japanese passenger car exports







Sino-Vietnamese

Sino-Japanese

Commercial shipping: Regional shipping will likely face significant risks of disruption, as well as collateral damage from mines and long-range missiles.

Civil unrest: Although Vietnamese authorities have significantly cracked down on protests following the May 2014 anti-Chinese riots in Binh Duong and Dong Nai, any serious escalation of the dispute is likely to increase significantly the likelihood of civil unrest.

Conflict would increase the risk of Chinese protesters attacking Japanese businesses in major Chinese cities, as in 2012 when tens of Japanese businesses were ransacked and burned and hundreds of Japanese-brand vehicles were vandalized in more than a dozen cities.

Commercial retaliation: China is Vietnam's top import partner, accounting for roughly 32% of Vietnamese imports, including key industrial goods. China could impose quotas or tariffs on Vietnam-bound exports, causing supply-chain disruptions to Vietnamese industries, impose sanctions against Vietnamese exports, and restrict Chinese investments into Vietnam. China could also impose economic sanctions, such as the suspension of rare earth mineral exports, which are necessary for many Japanese technology-based industries. In 2012, escalation of the dispute led Japanese exports to China to fall by 14.5% between June and November, with automotive exports registering particularly large drops.

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For more information, visit ihs.com/QCR14ChinaSeas

NUMBERS





Millions of metric tons of nickel ore exported by the Philippines to China in 2013, more than to any other country





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