Center for Security Studies

STRATEGIC TRENDS 2016

Key Developments in Global Affairs

CSS ETH Zurich

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Acknowledgments

Strategic Trends is an annual publication of the Center for Security Studies (CSS) at ETH Zurich. It offers a concise analysis of major developments in world affairs, with a primary focus on international security. Providing interpretations of key trends rather than a comprehensive survey of events, *Strategic Trends* targets a broad audience ranging from policy-makers to the media, academics, and the general public. *Strategic Trends 2016* is the seventh issue in the series.

The publication series is available for download at the website of the Center for Security Studies: www.css.ethz.ch/publications/strategic-trends.

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As always, we hope you enjoy reading *Strategic Trends 2016.*

Should you have any feedback, please do not hesitate to contact us at StrategicTrends@sipo.gess.ethz.ch.

With best regards from Zurich,

Dr. Oliver Thränert
Head of Think Tank at CSS

Dr. Martin Zapfe
Head of the Global Security Team

Strategic Trends 2016: Introduction

2015 was not a good year for international peace and stability – and 2016 will most likely not be any better. Recurrent editions of *Strategic Trends* have described facets of a continuous worsening of geopolitical stability in key global regions. It was not until last year, however, that the last European felt direct repercussions of those conflicts in North Africa and in the ever tumultuous Middle East. We cannot help but diagnose both a deterioration of the numerous conflicts and an aggravation of their consequences.

Against this background, the researchers of the Center for Security Studies (CSS) at ETH Zurich debated intensively which key developments would shape international politics in the coming year, and what the major consequences could be. As is tradition with the *Strategic Trends* series, the result is five chapters introducing and analyzing key developments in international affairs – though in no way all the important trends for 2016.

The first two chapters focus on Europe. At the beginning, **Daniel Keohane** diagnoses a fundamental paradigm shift in European security politics, namely a renationalization of defense cooperation. Nation states, always at the core of the European project, gain in importance, while institutions struggle for relevance. This contrasts markedly with security challenges that are, at their core, trans-national: As **Lisa Watanabe** writes in her analysis of the political economy of migration, the effects of the huge number of migrants arriving in Europe pose tremendous challenges both to the internal policy mechanisms of the European Union as well as its concept of foreign policy – especially its relations to authoritarian states.

It has become impossible to write about European security challenges without using the term 'hybrid warfare' to describe the complexity of threats. However, writes **Prem Mahadevan**, this concept is by no means applicable only to Europe. To the contrary, the current state of power politics in Asia surrounding the continuing rise of China has shown remarkable similarities to the Russian conduct in Crimea – and are beset with the same dangers of unpredictability and escalation. In many of Asia's conflicts, and in fact globally, the picture is complicated by the increasing importance of weapons long thought obsolete: **Oliver Thränert** warns that the increased salience of nuclear weapons coincides with a lack of political interest in arms control. As a result, concerns over nuclear stability are not as much a thing of the past as often assumed.

Finally, as if this were not enough, **Severin Fischer** casts a light on key implications of a world energy order in flux – an order where conventional wisdom too often falls short, and where internal instability in states vital to regional security structures might well lead to new conflicts that, as the last year showed, will have repercussions felt worldwide.

CHAPTER 1

The Renationalization of European Defense Cooperation

Daniel Keohane

European governments need to cooperate on defense matters. Orthodoxy holds that this cooperation should be directed by NATO and the EU. In fact it is national governments that are driving European defense cooperation, and they are doing so in a variety of ways. Their methods include bilateral, regional and *ad hoc* arrangements, as well as working through the Brussels-based institutions. The success of European defense cooperation, therefore, will depend on the convergence or divergence of national policies.

German, British and French frigates are escorting the French aircraft carrier *Charles de Gaulle* as part of the coalition against the 'Islamic State', 18 January 2016.

Europeans face a complex confluence of security crises, which may further overlap and intensify during 2016. These include an unstable Ukraine and an unpredictable Russia; a fifth year of war in Syria, which has generated extensive refugee flows into the European Union; the emergence of ISIS in Syria and Iraq, which has created a new terrorist threat within the EU; and state failure in Libya, where ISIS-aligned militants are increasingly active and large numbers of migrants and refugees have passed through on their way to Europe.

Aside from their complexity, one key new dimension of this set of security challenges is that Europeans now have to defend their territories and manage external crises simultaneously. Another important aspect is that the lines between internal and external security are increasingly blurred.

Against this backdrop, the EU is expected to adopt a new 'global strategy' at a summit in June 2016, which will set out priorities and guidelines for EU foreign, security and defense policies. A few weeks later the North Atlantic Treaty Organization will hold a summit in Warsaw, where its members will discuss the Alliance's role in coping with Russian aggression in Eastern Europe and disorder across the Middle East.

These institutional processes are extremely important for European defense cooperation, since European governments need to cooperate with each other. But European defense cooperation will be driven more by the coming together of national priorities than by the efforts of institutions such as the EU and NATO. European security and defense cooperation will continue, but it will be mainly bottom-up – led by the national governments – not top-down, meaning directed and organized by the institutions in Brussels.

Furthermore, the 'Big 3' – France, Germany and the UK – aim at substantially higher levels of defense ambition, whereas other European governments are forced to prioritize. And sometimes national priorities diverge decisively. This poses tremendous challenges for European defense cooperation, but it may also provide a framework for more fruitful cooperation.

National governments retake center stage

The EU and NATO should and will continue to encourage deeper European cooperation, not only to help avoid excessive fragmentation or duplication of European collaborative efforts, but also to coordinate and support disparate national policies.

However, European defense cooperation is increasingly driven by the coming together of national defense policies in various different ways rather than by the efforts of European or trans-Atlantic institutions alone.

Institutional orthodoxy

Considering the range of security crises that Europeans face, the case for deeper European military cooperation is strong. For one, there has been mounting ambiguity over the role of the United States across the EU's neighborhood, although there is currently an intense debate in the US about increasing the American military presence in Europe and the Middle East. The Obama administration announced in February 2016 that it plans to quadruple its military spending in Europe, and to increase the budget for its anti-ISIS campaign by 50 percent. Even so, the US appears unwilling to manage all the crises across Europe's neighborhood, meaning Europeans may sometimes have to respond without American leadership or assistance.

For another, no single European country has the military resources to cope with all the crises alone. European defense budgets have been cut considerably since the onset of the economic crisis in 2008. According to the most recent figures from the European Defense Agency (EDA), national defense budgets in the EU decreased by around 15 percent between 2006 and 2013. The good news is that in early 2016 (in his Annual Report 2015) the NATO Secretary-General announced that the decline in European defense spending has now stopped.

Institutional orthodoxy in the EU and NATO holds that reduced national defense budgets, especially for equipment, should surely spur more cross-border collaboration. European armed forces have a number of capability shortfalls, such as intelligence, surveillance and reconnaissance equipment, and the cost of advanced equipment typically rises by around 5 percent a year. This message has not reached the national capitals. Between 2006 and 2011 EU governments spent around 20 percent of their equipment budgets on pan-European collaboration each year – by 2013 this figure had fallen below 16 percent, according to the EDA. Just over 2 percent of the combined defense spending of EU governments is spent on European collaborative equipment procurement.

Similarly, European governments have become less willing to send soldiers abroad for peacekeeping operations, and more selective about which missions they participate in. The average number of soldiers EU governments sent abroad fell from about 83,000 in 2006 to just over 58,000 in 2013. All the European members of NATO contributed to its operations in Afghanistan during the 2000s, but less than half participated in NATO's 2011 military intervention in Libya. The EU has deployed around 30 peace operations since 2003, but 24 of these were initiated before 2009, and the pace and size of new missions has dropped considerably since then. In addition, Europeans accounted for less than 7 percent of the 90,000 United Nations (UN) peacekeepers deployed during 2015.

It is true that NATO's central role in European territorial defense has been reinvigorated since 2014 by Russia's aggression in Ukraine. Conventional deterrence is back in Europe, as a core task for European governments. But so far even these efforts have remained relatively modest. With a strength of only 5,000, the headline NATO formation for responding to Russian revisionism in Eastern Europe, the multinational Very High Readiness Joint Task Force (VJTF, within the broader NATO Response Force) prompts questions about its usefulness in some military scenarios. According to a 2016 RAND wargaming study, the longest it would take Russian military forces to reach the Estonian and/or Latvian capitals of Tallinn and Riga would be 60 hours.

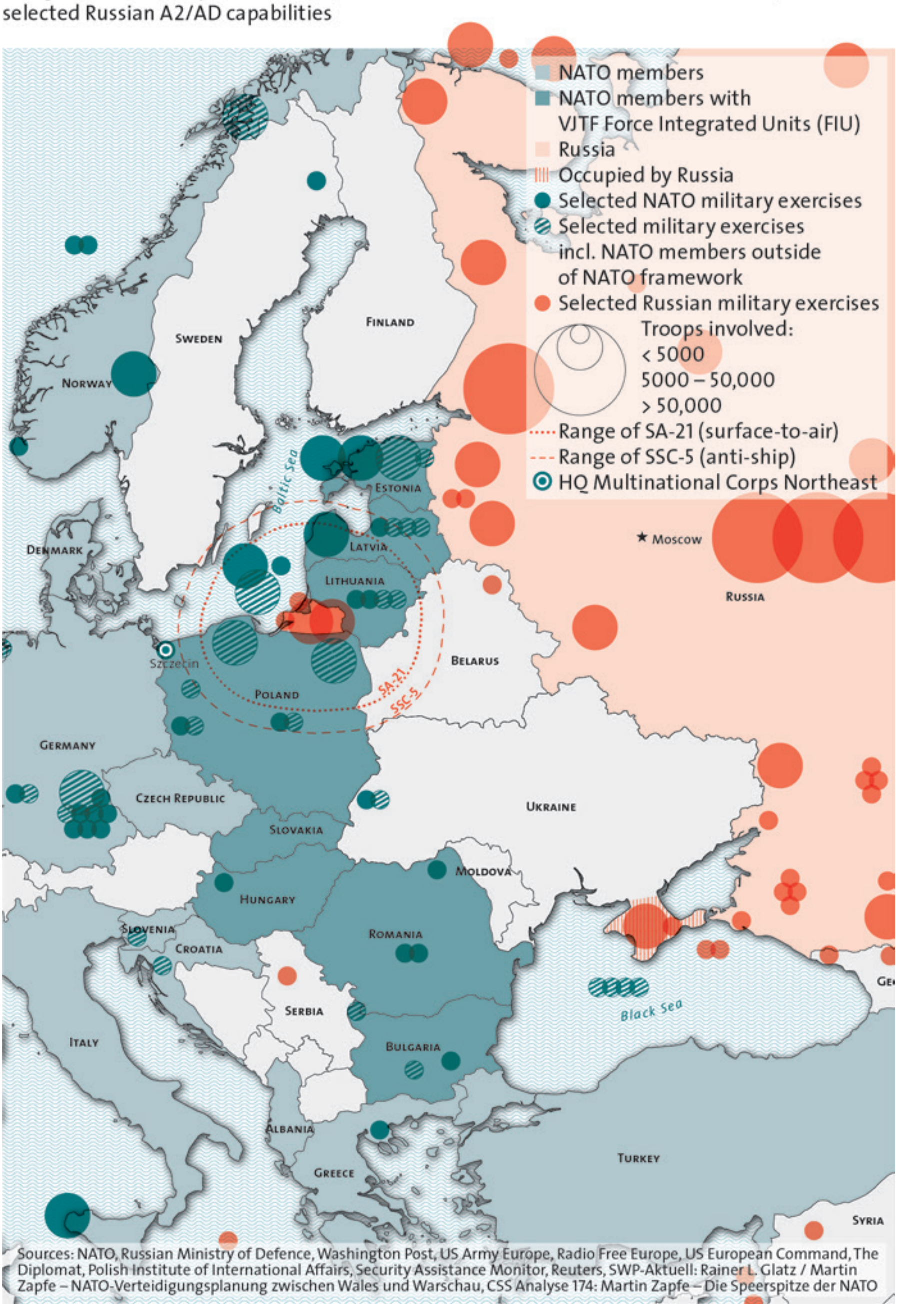
Regional clusters, bilateralism & ad hoc coalitions

However, even if the EU and NATO are struggling to encourage much deeper collaboration between their members, it would be wrong to think that there is no progress on European defense cooperation. For example, according to a June 2015 analysis from the European Union Institute for Security Studies (EUISS), in early 2015 there were nearly 400 ongoing military cooperation projects in Europe. These include initiatives such the European Air Transport Command in the Netherlands, which manages the missions of almost 200 tanker and transport aircraft from seven countries, and the Heavy Airlift Wing based in Hungary, which has helped 11 European countries procure and operate a fleet of C-17 transport planes.

Some countries are also working more closely in regional formats, such as Baltic, Nordic and Visegrad cooperation. And a number of European governments are pursuing deeper bilateral cooperation, including integration of parts of their armed forces in some cases. Examples include Franco-British, Belgian-Dutch, German-Dutch, Polish-German and Finnish-Swedish initiatives, amongst

NATO and Russia: Projections of Power

Designated VJTF reception facilities, selected NATO and Russian exercises in 2014/15, and selected Russian A2/AD capabilities



others. A few European governments, such as France, Spain and the United Kingdom, are also deepening their bilateral cooperation with the US.

Cooperation on operations has also become more *ad hoc* in recent years. The 2011 military intervention in Libya began as a set of national operations (run by France, the UK and the US) that were later transferred to NATO command. France intervened alone in Mali and the Central African Republic during 2013 (with some equipment assistance from allies like the US), both of which were followed by (small) EU capacity-building missions and UN peacekeeping operations. And the current coalition bombing ISIS in Syria and Iraq is exactly that: a coalition of the willing. Furthermore, the UK and Germany only stepped up their contributions to the anti-ISIS coalition following the November 2015 terrorist attacks in Paris. At the time of writing, another coalition of four countries – Britain, France, Italy and the US – was considering intervening in Libya to attack ISIS-aligned militants there.

Renationalizing cooperation

European governments are increasingly picking and choosing which forms of military cooperation they wish to pursue, depending on the capability project or operation at hand. Sometimes they act through NATO and/or the EU, but almost all European governments are using other formats as well, whether regional, bilateral or *ad hoc* coalitions of the willing. The combination of more complex security crises and reduced resources has meant that European governments are more focused on their core national interests than before, and both more targeted and flexible on how they wish to cooperate.

In many ways this renationalization of European defense cooperation is not new. As the aforementioned EUISS analysis put it, European defense collaboration is going 'back to the future', in that most major collaborative projects initiated from the 1960s to the 1990s – such as Eurofighter jets, A400M transporters and the Eurocorps – were *ad hoc* inter-governmental projects. The difference today is that more European defense cooperation is needed because Europeans face a wider range of complex threats and have significantly reduced resources for their defense. National priorities are driving European defense cooperation, which is why analyzing disparate national policies helps to understand the potential for greater convergence or divergence of those policies, and the prospects for deeper European defense cooperation.

The 'Big 3', Italy and Poland

This section shows the diversity of national defense policies in Europe, by surveying five countries – the United Kingdom, France, Germany, Italy and Poland. These five were selected based on their size (strength of armed forces, defense budgets and percentage of GDP spent on defense), membership of both the EU and NATO, and geostrategic priorities. Other major European countries – such as Spain, Turkey, the Netherlands, Romania and Sweden – are beyond the scope of this chapter, but they are no less important for European defense due to this. For each of the five countries surveyed, the basic outlines of their geostrategic and operational priorities, institutional preferences, and main capability investments are considered.

It becomes clear that the 'Big 3' are increasingly ambitious and aim to cover the full spectrum of military tasks, although there are some differences between them over geostrategic priorities, institutional preferences and willingness to contribute to some types of operations. All the others, basically, have to pick and choose, and their choices are dramatically diverse: Whereas Poland is looking east, Italy is focused almost exclusively on the south. While clear in their priorities, the relative narrowness of outlooks of most European governments compared to the 'Big 3' can strain the institutional frameworks for cooperation, whether NATO or the EU.

The United Kingdom – towards full-spectrum and global

In November 2015, the UK published a new security and defense review. In recent years, some NATO allies and international security experts criticized the UK for not contributing as much as it could towards tackling the growing number of crises in and around Europe. Having been long-considered Europe's leading military power (alongside France), the image of Britain as a declining military power had taken hold in some expert and political circles, both domestically and internationally. In many respects, the 2015 UK defense review carried out by the Conservative government is a response to these criticisms.

The previous review, carried out in 2010, was inspired more by fiscal austerity than by strategic concerns: The economic crisis had caused the government budget deficit to quadruple between 2007 and 2009. The defense budget was slashed by 8 percent in the five years after 2010, and the army was reduced to its lowest manpower level since the Napoleonic era. The 2015 version is more coherent and ambitious. For example, the 2010 review considered a large-scale military attack by other states to be a "low probability". Because of intervening Russian aggression in Eastern Europe (alongside other crises and the rise of the Islamic State) since 2010, Britain should now aim to simultaneously deter state-based threats and tackle non-state challenges.

Despite the urgent security crises in Europe's immediate neighborhood, the 2015 review emphasizes that Britain should keep a global outlook and develop closer military ties with partners in the Asia-Pacific, the Gulf and Africa. Alliances are also heavily underlined in the 2015 review, with a strong emphasis on working through NATO, which the UK considers to be the bedrock of its national defense. The UK intends to remain "NATO's strongest military power in Europe", and will continue to contribute to the Atlantic Alliance's defensive efforts in Eastern Europe, such as Baltic air policing and military exercises.

In addition, the UK intends to deepen its bilateral cooperation with three key allies in particular: the United States, France and Germany. Later this year, for example, a French general will become second-in-command of one of the British army's two frontline divisions, as part of a permanent exchange of military officers that underpins deepening Anglo-French military cooperation. A section on security cooperation through the EU comes after those covering NATO and bilateral collaboration, stating that the EU has "a range of capabilities to build security and respond to threats, which can be complementary to those of NATO". London would also like the EU and NATO to work together more effectively in tackling security challenges, such as countering hybrid threats.

For military tasks the review highlights two aspects in particular. One is the ongoing need for strong deterrence capabilities, represented by the continuation of the Trident nuclear program (some members of the main opposition party, Labour, question its usefulness). Another aspect is to be able to respond quickly and robustly to a variety of international security crises, meaning to be able to deploy externally rapid strike capabilities, ranging from special forces to aircraft carrier groups. Longer-term Afghanistan-style counter-insurgency deployments, which had characterized British military operations in the 2000s, are no longer viewed as an operational priority. Instead, projecting military power globally quickly ('in and out') and acting robustly will be the main operational priority, alongside a greater emphasis on deterrence.

This fuller-spectrum strategic approach will require resources. London intends to increase defense expenditure by around 5 percent by 2020 and promises to meet the NATO target of spending at least 2 percent of GDP on defense over the same period. Furthermore, Britain will invest GBP 178 billion (USD 262 billion) in military equipment over the coming decade, an increase of GBP 12 billion (USD 18 billion). That money will be spent both on preplanned projects, such as maintaining the Trident nuclear deterrent and developing two new aircraft carriers, and on ways to fill some capability gaps that resulted from the austerity-driven 2010 review (such as maritime patrol aircraft and new combat ships and armored vehicles). Plus, almost 2,000 additional intelligence officers will be recruited to track terrorists and cyberthreats.

This renewed level of British military ambition is important for NATO, as the UK is the largest European defense spender in the Atlantic Alliance. Following recent grumbling by some NATO allies, especially Washington, about Britain's declining military willingness and ability, the main political message that emerges from the 2015 defense review is that Britain is back as a serious military power. Whether this proves to be the case in practice remains to be seen, as unforeseen events may expose glaring capability gaps or budgetary difficulties may hamper some equipment projects. But the intention is clear.

The 2015 UK defense review is an ambitious defense plan by European standards, but the threat of a British exit from the EU (known as 'Brexit') hangs over British strategic ambitions. The UK government has to hold a referendum on its EU membership by the end of 2017, announced for 23 June 2016. Opinion polls in the UK currently show supporters and opponents of a Brexit in a dead heat. In the worst-case scenario, the UK outside of the EU would probably remain a significant military power (depending on the economic fallout), and both a member of NATO and a permanent member of the UN Security Council. But a Brexit would diminish the UK's standing as a diplomatic player since it would lose influence in Europe, no longer having a say over the EU's socio-economic, security, defense or foreign policies.

France – global outlook, regional priorities

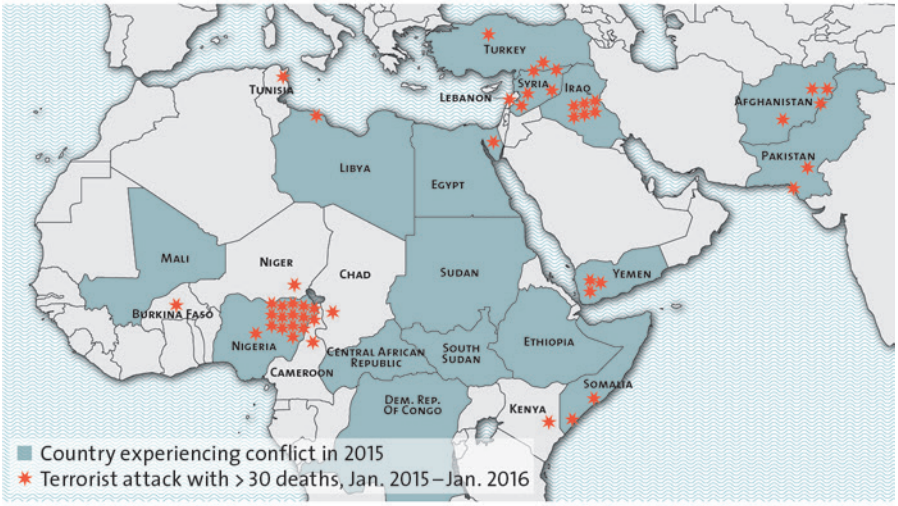
The main parameters of French defense policy were set out in a White Book published in 2013, which maintained a considerable level of strategic and operational ambition relative to most other European governments, despite its announcement of cuts to French defense spending (from around 1.9 percent to 1.76 percent of GDP) and personnel (24,000). Guaranteeing European and North Atlantic security is considered the second strategic priority (after protecting national territory). Paris has responded to intervening Russian aggression in Ukraine by sending an armored task force to Poland, increasing maritime patrols in the Baltic Sea, and cancelling the planned sale of Mistral amphibious assault ships to Russia.

Beyond Europe, French geostrategic priorities were narrowed in the 2013 White Book, prioritizing Africa (mainly North Africa and the Sahel) and the Middle East from the broader "arc of instability" – stretching across Africa, the Middle East, the Indian Ocean and Central Asia – highlighted in the previous 2008 version. The Indian Ocean was underlined as the next geostrategic priority, while highlighting the potential for strategic trouble in East and South-East Asia. In other words, France intends to be a "European power with global reach", continuing to strengthen military ties with a number of partners in the Gulf and the wider Indo-Pacific, even if it should prioritize security challenges to Europe's south.

Following the November 2015 terrorist attacks in Paris, French President Hollande declared that France is "at war" with ISIS, meaning that the geostrategic focus on the Middle East, North Africa and the Sahel has been reinforced. This seems unlikely to change during 2016, but it does put added strain on French defense resources, given increased domestic deployments of French forces and the intensified bombing campaign against ISIS in Syria and Iraq (with perhaps another front to be opened in Libya). Plus, France has been the most internationally militarily active European country over the last five years. Alongside intervening in Libya and Côte d'Ivoire in 2011, Mali in 2013, and the Central African Republic (CAR) in 2013/14, France has kept 3,000 soldiers in West Africa (stationed in Nigeria, Niger, Chad and Burkina Faso) and sent its aircraft carrier, the 'Charles de Gaulle', to the Persian Gulf.

As a result the French asked their EU partners to support their anti-ISIS operation and/or relieve French forces elsewhere, such as in Mali or Lebanon. Both Germany (in a support role) and the UK have joined the anti-ISIS bombing campaign in Syria, while (at the time of writing) some other EU partners have indicated that they will send peacekeepers to relieve French forces elsewhere. However, increased domestic and Middle Eastern

Europe's turbulent southern neighborhood



Sources: IISS Conflict Database, Washington Post, Foreign Policy, Guardian, Reuters, AP, BBC, Al Jazeera, Voice of America, AFP, news24.com, The Cable

commitments may reduce France's ability to contribute substantially to defending NATO territory in Eastern Europe. For example, some 10,000 soldiers have been deployed domestically during 2015 to protect sensitive targets.

The French invocation of the EU's mutual assistance clause (article 42.7) in November 2015 also highlights France's long-standing commitment to a stronger EU defense policy, especially among French Socialists, which form the current government. The 2013 White Book, for example, mentioned the utility of an EU White Paper on defense policy. But for Paris, EU defense should remain an inter-governmental endeavor, which is why it activated article 42.7 and not article 222 (the solidarity clause) which foresees a strong role for EU institutions.

An additional practical reason (amongst others) to act via the EU, rather than invoking NATO's article V, was to keep open the option of working with Russia against ISIS in Syria. But as their national interventions in Mali and CAR showed, the French do not assume that other European governments will always support their military activities, and Paris is prepared to act alone if necessary. In fact, the most supportive NATO ally of French military actions in recent years has been the US (which, for instance, provided aerial refueling and troop transportation for the Mali intervention).

France also announced during 2015 (after the January 'Charlie Hebdo' terrorist attacks in Paris) that the French defense budget would rise by EUR 3.9 billion from 2016–2019, resulting in a 4 percent increase in real terms, and keeping French spending at around 1.8 percent of GDP up to 2019. France is spending this money on maintaining its nuclear deterrent (which consumes 12 percent of the French defense budget), and on developing a variety of capabilities to ensure it can continue to project armed force abroad, but with a greater emphasis on intelligence-gathering and rapid response. The overall numbers of fighter jets, tanks and ships (to a lesser degree) are being cut, but some of those capabilities are being replaced with more advanced models – and are being supplemented with more drones, satellites, transport planes, guided missiles and special forces.

Germany – the European pivot

Germany is currently undergoing a defense White Book process that should conclude during the summer of 2016. A set of defense policy guidelines were published by the German defense ministry in 2011, which focused on broadly defined generic threats (rather than country-specific ones) such as failing states, international terrorism, cyber-security and the spread of weapons of mass destruction. It also emphasized the importance of multilateral frameworks, such as the UN and the EU, adding that NATO is the centerpiece of German defense efforts.

Germany's non-participation in the 2011 NATO bombing campaign in Libya (and its abstention from the UNSC vote on the same) had a negative impact on Berlin's relationship with its closest allies. Moreover, Germany's unwillingness to take on combat roles in Mali in 2013 and CAR in 2014 – although it did send trainers and other support assets – fed into an image of a country that was happy to let other Europeans shoulder the heavier military burdens. In early 2014, speeches by the German president, foreign minister and defense minister all underlined that Germany should be prepared to take on more responsibility for international security, including with military means.

In response to the Russian annexation of Crimea in March 2014, Germany not only led European diplomatic undertakings such as placing EU economic sanctions on Russia, but also pledged to reinforce rotating air-policing capacities in the Baltic States, sent a vessel to the NATO naval task force in the Baltic Sea, and doubled its presence in NATO's Multinational Corps Northeast headquarters in Szczecin, Poland. In addition, Germany has integrated its land forces into NATO's military exercises scheme to strengthen its troop presence in Eastern Europe. All this is intended to demonstrate Germany's firm commitment to NATO's defense and assuring Eastern allies, as well as deterring Russia.

However, in some respects this is not new. West Germany played a crucial front-line role in NATO's territorial defense during the Cold War. In this sense, there could be a danger that Berlin is now comfortably going back to the future, focusing mainly on NATO's territorial defense rather than developing a more responsible full-spectrum role in international security.

Yet, the consequences of the November 2015 Paris attacks may influence the 2016 White Book debate on Germany's participation in external operations. Berlin moved quickly to get parliamentary approval to send reconnaissance and tanker aircraft as well as a frigate to support the intensified French and allied anti-ISIS bombing campaign in Syria. While this is not a full-blown combat role, it amounts to much more than Germany's previous rather modest support efforts to French-led combat operations in Mali and CAR.

Part of the reason for Germany's relatively rapid response to French requests for help in fighting ISIS was not only to show solidarity with France, but also to demonstrate its commitment to EU defense policy (alongside its firm commitment to NATO). Although not an EU operation, France formally asked for European support in fighting ISIS via article 42.7, the mutual assistance clause, of the EU treaties. Furthermore, the current German government, a grand coalition of Christian Democrats and Social Democrats, is rhetorically committed to the future establishment of a European army. Whether or not such an army ever comes into being, European cooperation is central to Germany's worldview and strategy for coping with international security challenges – as stated in Germany's 2014 foreign policy review.

European military cooperation – indeed integration – is also important for Germany from a more practical viewpoint. Although Germany is boosting its defense spending by around 6 percent by 2019, there remain a number of capability gaps and shortages, especially adequate numbers of usable aircraft (as highlighted in the 2016 German defense ombudsman report). In January 2016, the German Defense Minister announced a plan to invest some EUR 130 billion in defense equipment by 2030. Berlin also strongly pushes for more pooling and sharing of (mostly European) capability efforts, having proposed the 'Framework Nations Concept' for deeper capability development within NATO since 2013. Germany is putting its rhetoric into practice by integrating a Dutch mechanized brigade in the German 1st Armored Division, placing a German battalion under a Polish brigade, and investigating ways to further develop the Franco-German brigade.

Italy – looking southwards

Italy is the largest defense spender, by some distance – after Britain, France and Germany – of the remaining European members of NATO (and the EU), and has been an active contributor to NATO, UN and EU operations over the last 20 years. In 2015, Italy produced a new defense White Paper, replacing a White Book published in 2002. The 2015 White Paper is important for a number of reasons, since it lays out Italy's strategic vision, operational priorities and spending intentions. In particular, the center-left government elected in 2014, led by Matteo Renzi, has been keen to show its reformist credentials, including on defense policy. The document assigns a central role to an interest-based approach to international security, and is unambiguous about the need to use military force, including for deterrence purposes.

Traditionally, Italy has been strongly committed both to NATO solidarity and European integration. The 2015 White Paper places both the EU and NATO on an equal footing for Italy's contribution to international security. Moreover, NATO's role is primarily defined in defensive and deterrence terms, both for the defense of national territory and Europe as a whole. The EU is presented as important for Italy in two ways. First, Italy intends to pursue cooperation on capability development more vigorously with other European allies, and the EU – specifically the European Defense Agency – is a vital conduit for such cooperation.

Second, working through the EU is also important for carrying out external operations, since EU defense policy forms part of broader EU foreign policy and mainly performs out-of-area missions. As a result, Italy, like Germany, is more relaxed than some other Europeans about discussing shared European sovereignty on defense matters, such as a stronger role for the European Commission in defense market and research issues.

Italy's economic difficulties in recent years, coupled with more austere government budgets, has meant that fewer resources are available for Italy's national defense effort. Italian defense spending as a percentage of GDP fell from 1.3 percent in 2011 to 1 percent in 2015 (according to NATO estimates). The 2015 White Paper, therefore, is very clear on what Italy's strategic and operational priorities should be. In particular, the 'Euro-Mediterranean' region is highlighted as its primary geostrategic focus. This region is conceived in broad terms, covering the EU, the Balkans, the Maghreb, the Middle East and the Black Sea. But it is clear that Italy, which had previously sent troops as far afield as NATO's mission in Afghanistan, will now primarily worry about its immediate neighborhood.

This is probably not surprising, given the turbulence that has affected some of these regions in recent years, especially North Africa and the Middle East. Turmoil in Libya, for example, has greatly contributed to the large numbers of migrants being smuggled across the Mediterranean to Italy. Interestingly, Italy does not only intend to contribute to international coalitions (whether NATO, UN or EU) in this Euro-Mediterranean space. It is also prepared to lead high-intensity full-spectrum crisis management missions across this region.

In other words, even if the geostrategic priority for Italian defense policy is narrower than for other large European powers, its external operational ambitions remain relatively robust. As three Italian analysts described it in a December 2015 RUSI Journal article, Italy intends to be a "regional full-spectrum" military power. At the time of writing, it seemed that Libya may become the first stern test of the approach outlined in the 2015 White Paper, as an Italian military intervention (probably in coalition with France, the UK and the US) may be required to fight ISIS-aligned Islamist militants in that country.

Poland – looking eastwards

Poland's geostrategic and operational approach contrasts quite markedly with Italy's. For one, Poland is primarily geographically focused on Eastern Europe. For another, its operational priority is to improve both national and NATO's defensive efforts, rather than contributing to robust external missions. Poland for example did not participate in NATO's air bombing campaign in Libya in 2011. The Russian annexation of Crimea in 2014, following the war between Russia and Georgia in 2008, strongly reinforced

Selected military capabilities

As of 2015

	Defense budget in USD billion	Active troops	Deployed troops (incl. on their own overseas bases)	Main battle tanks	Combat aircraft	Principal surface vessels	Submarines
United Kingdom	56.2	154,700	18,724 *	227	254	19	10
France	46.8	208,950	18,326 *	200	281	23	10
Germany	36.7	178,600	2,645 *	306	235	15	5
Italy	21.6	174,500	2,853 *	160	244	19	6
Poland	10.3	99,300	525 *	971	98	2	5

* not including navy missions

Source: IISS Military Balance 2016

a perception in Poland that Warsaw must invest more in its national defense, including through NATO.

In November 2014, Poland published a national security strategy which makes this defensive focus clear. It stated that "Poland concentrates its strategic efforts principally on ensuring the security of its own citizens and territory, on supporting the defense of allied states … and, afterwards, on participating in responses to threats occurring outside the allied territory". The national security strategy added that, in line with these strategic priorities, "Poland will focus on measures supposed to consolidate NATO's defensive function, including strategic strengthening of the eastern flank of the Alliance".

Poland also wishes to enhance EU efforts in security, in order for "the Union to have adequate security capacities at its disposal, including defense ones". In other words, Poland favors a stronger EU defense policy, if it can contribute to Poland's defensive efforts. In addition, the document says that Poland wants to deepen its bilateral military cooperation with the United States, and "will strive for the broadest possible military presence of the US in Europe, including Poland".

Since 2014, Poland has pushed hard for NATO allies to beef up their military presence in Poland, through exercises and at the Multinational Corps Northeast headquarters in Szczecin, and to implement NATO's Readiness Action Plan more quickly. Like its predecessor, the new conservative government elected in September 2015 would like NATO allies to install permanent military bases on Polish territory. To help convince more skeptical southern NATO members, who are focused on Middle Eastern disorder, Warshaw signalled in February 2016 that it would be willing to increase its military involvement in the Middle East. That same government will host a NATO summit in July 2016 in Warsaw.

Poland is also putting its money where its mouth is on national defense. According to NATO estimates, Poland met the Alliance's agreement to commit 2 percent of GDP to defense expenditure for the first time in 2015 (as did only three other European members of NATO – Estonia, Greece and the UK). In 2001 Poland passed a law committing the government to spend at least 1.95 percent of GDP on defense each year, and during 2015 the previous government modified this law, increasing defense spending to at least 2 percent of GDP. The new government has promised to consider raising this percentage further, having suggested during its pre-election campaign that Poland should spend as much as 2.5 percent of GDP on defense.

The Polish defense minister would also like to increase the size of the Polish army, starting with creating three new brigades for territorial defense on its eastern border. Prior to the election of the new government, Poland was already implementing an ambitious national military modernization plan, having committed itself to spending around USD 37 billion on military modernization by 2025. This money will be spent on upgrading armored and mechanized forces, anti-seaborne threat systems, new helicopters, air and anti-missile defense systems, submarines, and drones.

Outlook: convergence and divergence

In many respects there are increasingly common views among European governments on a number of security challenges. Practically all European governments care about the threats concerning terrorism, cybersecurity, organized crime, the spread of weapons of mass destruction and state failure. And all agree in principle on the need to work together on developing costly military capabilities, with many investigating closer forms of military integration, not only cooperation with other countries.

But in some aspects there remain major differences among national defense policies, especially on geostrategic priorities. Only France and the UK retain a truly global outlook, although France is clearer that its priorities are Europe, Africa and the Middle East. Germany and Poland prioritize European security, especially the challenge of Russia, while Italy is more focused on North Africa and the Middle East. In a similar vein, only France and the UK, and to a lesser extent Germany, can simultaneously aim to perform a wide range of territorial defense and foreign intervention tasks. Other Europeans have to be choosier for a mix of geostrategic, political and budgetary reasons.

A Tale of Three Cities – Berlin, London and Paris

France, Germany and the UK collectively account for almost two thirds of EU defense spending, and just over 60 percent of defense expenditure by European NATO members. This means that their national defense policies have an enormous impact on European defense as a whole. There are a number of similarities in their approaches, alongside many clearly-identified shared interests. Each country is aiming to be as full-spectrum as possible, maintaining the ability to both adequately defend territory and deploy abroad.

Each of them has also promised to increase defense spending in the coming years, reflecting the difficult confluence of security crises that Europe faces today. All three have made important contributions to NATO's reassurance measures to allies in Eastern Europe, such as participating in Baltic air policing. And all three have deployed forces to help fight ISIS and other Islamists in Africa and the Middle East, such as in Mali.

But there are some important differences between these three European heavyweights, too. Britain and France, for instance, are nuclear-armed powers and permanent members of the UN Security Council (UNSC), whereas Germany has no nuclear weapons (nor any intention of acquiring them) and is not a permanent UNSC member.

Britain and France are also much more experienced and more willing to carry out robust external military interventions, whereas Germany, up to now, has been more hesitant, preferring post-conflict peacekeeping and state-building efforts. France and Germany are relatively comfortable acting militarily through the EU, and support a stronger EU defense policy (alongside NATO) – although Berlin is more relaxed than Paris about sharing sovereignty on defense matters – whereas

Britain strongly prefers to act militarily through NATO or other formats.

There are reasons to think that there may be some more convergence between Franco-British-German defense policies during 2016 and beyond. Following the terrorist attacks in Paris in November 2015, France stepped up its military operations against ISIS in Iraq and Syria, the UK joined in the bombing campaign in Syria (it already participated in Iraq), and Germany beefed up its support effort to the anti-ISIS coalition beyond sending weapons to the Kurdish Peshmerga, by sending a frigate and reconnaissance and tanker aircraft to support French bombing sorties. Additionally, all three will continue to contribute towards NATO's defensive efforts in Eastern Europe. But there is potential for some divergences as well, for example between the UK and France-Germany on EU defense policy, or between Germany and Britain-France on burden-sharing in the Middle East and Africa.

Prioritization tests for the rest

Due to a mix of security priorities, lower levels of resources for defense and smaller size, Italy and Poland – and other European governments – face a different set of challenges to those of the 'Big 3'. On the one hand, they are more dependent on cooperation with other countries, including through NATO and the EU. On the other, in comparison to the more powerful countries, they have to prioritize more narrowly where to direct their defense efforts, both geostrategically and operationally.

Many of these countries, like Italy and Poland, have produced new national security strategies or defense plans in recent years, and most are mainly concerned about instability in their immediate neighborhoods. However, there are some divergences in their geostrategic and operational priorities as well as their levels of defense spending.

For example, some like Italy are more focused on the Middle East and North Africa, others like Poland are focused on Russia and events in Ukraine. Similarly, a number are increasingly investing in territorial defense capabilities, while some others are more concerned about projecting force abroad. At the same time, strategic signals (even if only symbolic in some cases) such as Spain leading NATO's Spearhead Force for deterring Russia (the VJTF) or Poland indicating a willingness to boost its military engagement in the Middle East, do offer encouragement for improving the overall coherence of European defense cooperation.

Capitalizing on convergences, managing divergences

The effectiveness of European defense cooperation will depend to a large extent on the ability of Britain, France and Germany to not only agree, but to also convince other European governments to support their approaches. Germany, as the largest and most powerful EU country, will play a pivotal role in coordinating European defense cooperation efforts, if it is able to "lead from the center" (to quote German Defense Minister von der Leyen). Germany shares much of the outlook and ambition of the UK and France, but with more constraints, which in turn gives Berlin a good understanding of the limits of other Europeans.

As much as the orthodox model of European defense cooperation – the institutionalized, top-down approach of the EU and NATO – has struggled, the current security crises and concomitant need for cooperation could contain the nucleus for future progress. The renationalization of European defense cooperation can lead to stronger European defense, including through the EU and NATO, if European governments capitalize on the convergences and manage the divergences of their disparate national defense policies. In turn, the EU and NATO should continue to help coordinate national policies and encourage cooperative projects, and treat the renationalization of European defense cooperation as an opportunity to reinvigorate their institutional efforts.

CHAPTER 2

Borderline Practices – Irregular Migration and EU External Relations

Lisa Watanabe

Irregular migration to Europe from the Middle East, Africa, South Asia and beyond will have ramifications for the European Union that go beyond the immediate challenges posed to border control-free travel and asylum procedures in the EU. The EU's migration agenda is increasingly being taken up within the foreign policy realm as the need to focus on the external dimension of migration takes on greater urgency. However, 'externalizing' migration management practices through coopting neighboring states is likely to come at a normative price, given that a migration control oriented agenda that primarily serves EU interests is being outsourced.

A memorial stone for the Schengen Agreement is erected in the small village of Schengen, Luxembourg, 27 January 2016. The treaty with the goal of eliminating internal border controls was signed at the quay of the Moselle river at the tripoint of France, Germany and Luxembourg.

Acute irregular migration to Europe over recent years has important implications for the EU as a foreign policy actor, though the shaky future of the Schengen System and an increasingly moribund 'Dublin rule' have drawn the most attention as a sense of crisis has gripped the Union. Unprecedented numbers of people arriving irregularly in the EU, due to conflict and instability in the EU's immediate and wider neighborhood, have had the effect of pushing the management of the migration further into the foreign policy realm, reinforcing an already emergent trend.

The process of 'externalizing' the management of the EU's external border beyond the Union's actual frontier, primarily through 'outsourcing' border control practices to source or transit countries had, to be sure, begun even before the current migration crisis. Yet, this process is now being taken a step further, involving more dimensions of foreign policy and heightened efforts to share the burden of curbing irregular migration with non-EU countries.

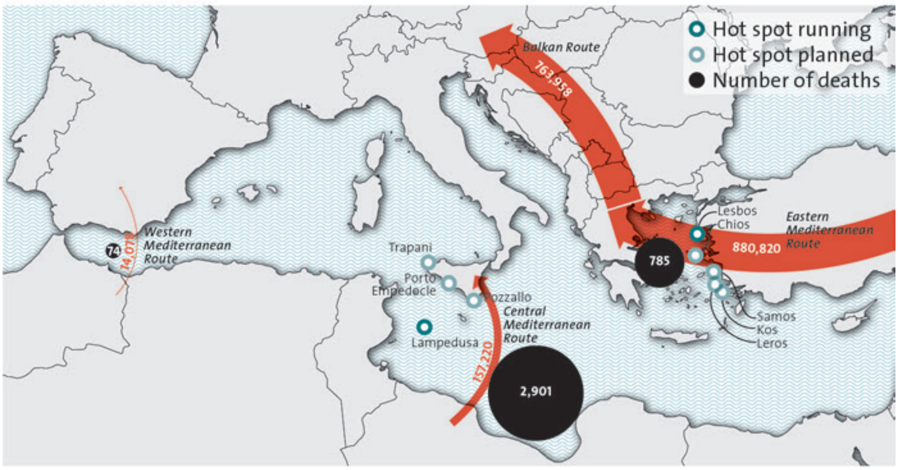
As such, the viability of the 'borderless' Schengen zone and the future of EU asylum procedures are increasingly dependent on the willingness and ability of neighboring countries to reduce irregular migration to the EU. Yet, these countries will need incentives to do so, and the EU may have more leverage with some countries than with others. The recent deal with Turkey, for example, has shown that certain countries hold considerable bargaining chips of their own. Even employing the EU's normative agenda strategically may prove difficult when faced with fairly reform-resistant countries that are important from a migration viewpoint. Outsourcing control practices could also lead to the violation of human rights, including those linked to international protection, raising yet more troubling issues for the EU.

This chapter sets out the scale of irregular migration to Europe and the major migration routes used to reach the EU. It then outlines the pressure that recent irregular migration flows have placed on border control-free travel in Schengen Europe and related EU asylum practices. It then looks at how the EU has sought to reduce irregular migration to its territory through externalizing border management to its neighbors. Finally, it deliberates the dilemmas this generates for EU foreign policy.

Acute migration flows: Pressure at the EU's border

Significantly elevated irregular migration to Europe over the past five years is a reflection of increased instability in Europe's near abroad and beyond. The

Migratory routes to Europe, Jan – Nov 2015



Sources: IOM, Euronews, Frontex, Greek Ministry of Foreign Affairs

Arab uprisings that swept across North Africa and the Middle East in 2010 and 2011 were initially responsible for more acute irregular migration to Europe. More recently, ongoing conflict and political instability in the Middle East, Africa and South Asia have been responsible for the largest irregular arrivals of migrants to the EU to date.

First, some definitions are essential. Migrant arrivals generated by such geopolitical developments are irregular in so far as they take place outside the regulatory norms of sending, transit and receiving states. From the viewpoint of receiving countries in Europe, this implies entering, staying or working without the necessary authorization or documents. Among the people undertaking irregular migration are economic migrants, people fleeing conflict and persecution, who intend to claim asylum, and people who fall somewhere in between. As such, irregular migration to Europe is mixed in nature.

The number of people coming to the EU irregularly is at an all-time high. 2014 was considered an unprecedented year for irregular migration to the EU, with some 280,000 instances of irregular entries. Yet, this number was surpassed in the first six months of 2015 alone, when 340,000 'irregular' migrants entered the EU. Syrian, Afghan and Eritrean nationals constituted the majority of people undertaking irregular border crossings.

By September, this figure had almost doubled again, reaching almost 617,412 irregular border crossings, and the number kept growing.

Migrants entering the Schengen/EU zone irregularly use three main routes, in addition to international airports. The primary route used is the Eastern Mediterranean route, which comprises the sea passage from Turkey to Greece, Cyprus and Bulgaria. This is followed by the Western Balkan route, which comprises migratory flows from the Western Balkans and secondary movements of migrants from the Eastern Mediterranean route. The third major route is the Central Mediterranean route to Europe, which until 2015 constituted the major route and consists of the sea passage from North Africa, especially Libya, to Italy and Malta.

Pressure points reflecting the relative importance of these routes exist along particular sections of the EU's external border. In 2014, Italy became a 'frontline' country, given the predominance at the time of the Central Mediterranean route. As the Eastern Mediterranean and Western Balkan routes have gained in importance, additional pressure points have emerged. As more people attempt to enter the EU irregularly from Turkey via the Aegean Sea, the Greek islands of Lesbos, Chios and Kos have also come under particular stress, due to higher numbers of Syrians and Afghans taking this route.

From the Greek Aegean islands, many migrants then take the Western Balkan route to the EU. This has placed the Hungarian and Croatian land borders with Serbia under intense pressure. Syrian and Afghan nationals are especially well represented in irregular migration flows across this route.

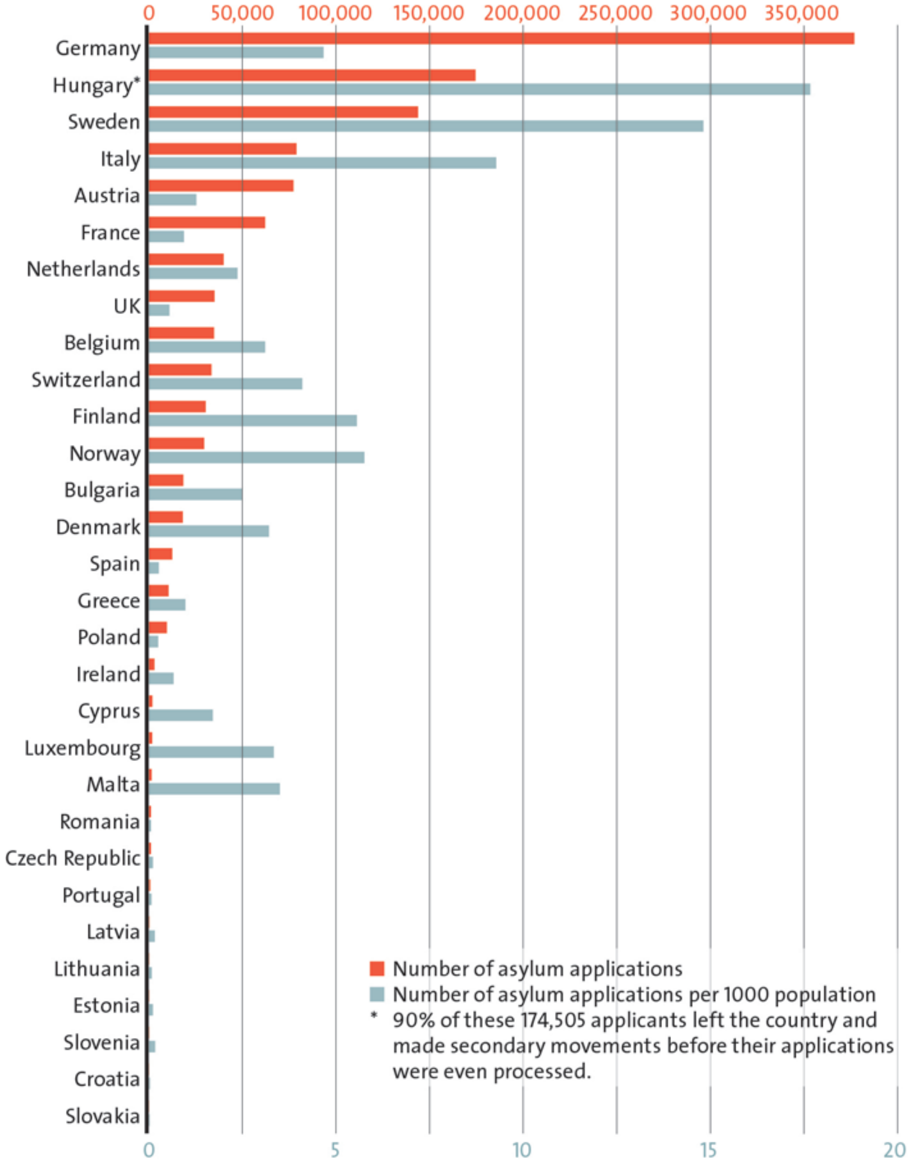
Given diverse reasons for irregular migration to Europe, the EU has also witnessed a corresponding surge in asylum applications, mostly in Germany, Sweden and Hungary. The figures for Hungary appear especially high due to the speed with which it appears to have processed claims. Moreover, most of those who sought asylum in Hungary have made secondary movements. The high number of asylum requests in 2015 has been primarily propelled by the conflicts in Syria and Iraq, as well as ongoing turmoil in Afghanistan; with Syrians, Afghans and Iraqi nationals constituting the majority of asylum claimants in the EU.

Schengen strained, Dublin defunct

The migration crisis has placed the Schengen and Dublin Systems under severe strain. To make matters worse, uncoordinated responses from Schengen/EU member states have not only

Asylum seekers in Europe

January to November 2015



Sources: Eurostat; AP; Hungarian Immigration Office; Austrian Ministry of Interior; Oct 15: Spain extrapolated; Nov 15: Romania, Malta, Luxembourg, Cyprus, France, Spain extrapolated (average of previous 3 months) led to tensions between them, but also prompted a crisis of confidence in the future of both systems.

Schengen shambles

Since its creation in 1995, the 'borderless' Schengen zone has depended on the effective management of the EU's external border. The Schengen Agreement thus provided for a common set of rules on border controls and visa requirements designed to meet that end.

In a bid to stop irregular border crossings to their territories, EU/Schengen states have taken a number of emergency measures. Some states have even erected razor-wire fences to secure their borders. Hungary, an EU Schengen state, has constructed a fence along the land border with Romania, Serbia and Croatia. Austria, also an EU Schengen state, is planning to erect a fence on its border with Slovenia, another Schengen state, which has constructed a fence along its border with Croatia, and Bulgaria, a non-Schengen EU state, has built a fence along its border with Turkey.

Several EU Schengen states have also re-imposed formal border controls in the intra-Schengen area. During the latter half of 2015, eight of the 26 Schengen states re-imposed temporary border controls. Germany temporarily reintroduced border checks, with a particular emphasis on the German-Austrian land border. The latter did the same along all its land border, with a particular focus on the Austrian-Slovenian border, where border crossings can only be made at authorized crossing points. These states were then joined by Slovenia, Sweden, the Netherlands, Norway, France and Malta, all of which temporarily re-imposed border controls. In early 2016, this trend persisted, with Sweden introducing border controls at its border with Denmark. The latter then followed by introducing controls at its borders with Germany to prevent Sweden-bound migrants travelling irregularly from getting stuck on its territory.

One should not forget that the Schengen zone has always allowed the possibility of the temporary re-introduction of border controls. Schengen member states may temporarily re-introduce controls at intra-Schengen borders when there is a serious threat to security or public policy for 30 days or for the likely duration of a threat that lasts longer.

Most of the countries that did this over the autumn/winter of 2015 or more recently have justified their actions on the basis of threats to security and public policy resulting from deficiencies in managing the external border. Exceptions were France and

Malta, both of which invoked security concerns linked to public events and, in the case of France, the risk of terrorist attacks following the November 2015 Paris attacks and the subsequent state of emergency in the country.

While temporary interruptions of border control-free travel in Europe have all taken place within the legal framework of the Schengen System, the number of countries temporarily re-imposing border controls over a short period of time has generated a crisis of confidence in the system itself. It has raised questions about the desirability of 'borderless' Europe and generated divisions over how to best improve the management of the external border. While reinforcing the external border and alleviating pressure on it may help ensure the survival of the system, more frequent temporary re-imposition of border controls seems likely and would mean a compromised Schengen System.

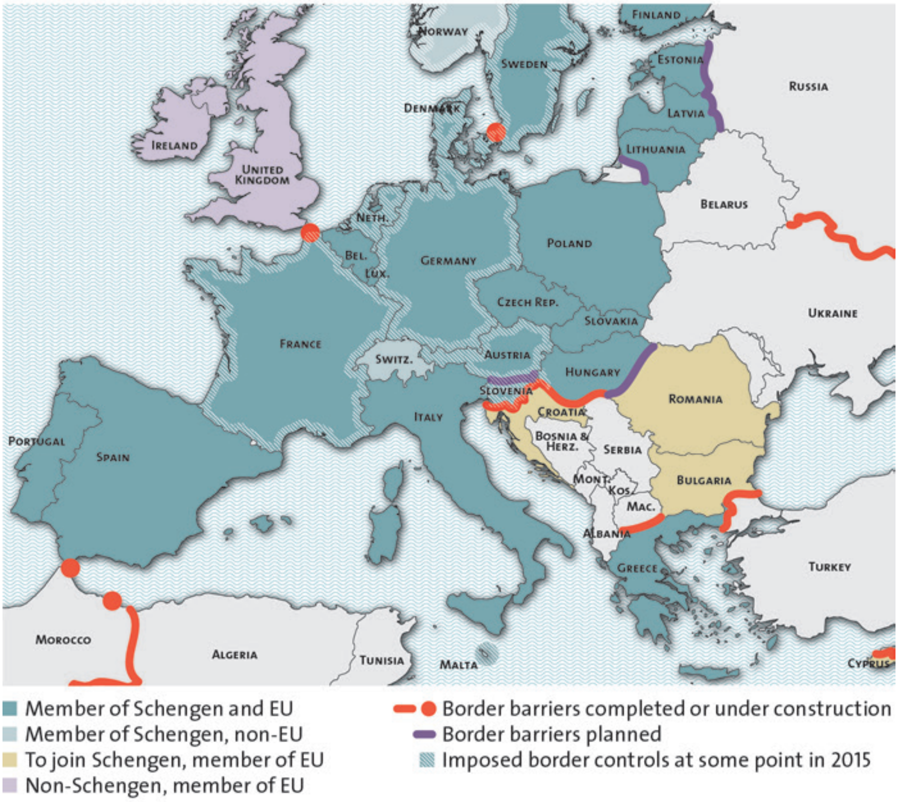
Dublin deficiencies

The recent increase in asylum claimants has also made deficiencies in the Dublin System painfully obvious. The system was created as complementary to Schengen. With border control-free travel possible, the Dublin System was put in place to prevent 'asylum shopping' and disputes between EU member states over responsibilities for handling asylum claims. Created in 2003, it introduced the so-called 'Dublin rule', which allocates responsibility for processing asylum applications to the countries in which those seeking asylum first arrive. Also, potential asylum seekers who travel on to secondary states risk deportation back to the EU country in which they first arrived.

A disproportionate burden on frontline states at the EU's external border, which includes Italy, Greece and Hungary, with land and sea borders across which irregular migration to the EU occurs, was hence built into the system. Asylum system capacities in these countries are consequently being severely stretched. Some states have struggled more than others to provide adequate protection and reception conditions to asylum seekers. To boot, Hungary's construction of a fence deliberately prevents asylum seekers from gaining access to protection.

Divergent asylum system capacities may also have the effect of encouraging secondary movements of people wishing to claim asylum, which was something that the Dublin System was set up to prevent in the first place. Many potential asylum seekers have attempted to make their way to northern European states that were perceived as having more generous asylum policies, Germany and Sweden being cases in point. One of the

Schengen members and border regimes



Sources: European Commission, Economist, Stratfor, Reuters

key contested issues is therefore how the Dublin System should be adjusted to reflect these differences in asylum system capacities.

EU member states have also generated divergent responses to the question of resettling people who have already entered the EU in recent months. In solidarity with frontline states and in recognition of Dublin System failures, several non-frontline states, notably Germany and Sweden, opened their doors to potential asylum seekers from Syria, expressly acting outside the Dublin rule. In further recognition that the Dublin rule would need to be suspended in response to the crisis, in September 2015 EU member states then agreed by consensus to resettle, on a voluntary basis, 40,000 irregular migrants from nationalities that have a high asylum rate (Syrians, Iraqis and Eritreans) from Greece and Italy over the following two years.

In a further move away from the Dublin rule, albeit also under emergency provisions, EU member states subsequently agreed on a temporary relocation system to resettle 120,000 asylum seekers over a two-year period, most of whom entered through Greece and Italy (Hungary choosing not to be a beneficiary of the scheme) across 23 EU states, with burden-sharing on the basis of a mandatory quota system. Greece and Italy are naturally exempt from further resettlement, and Denmark, Ireland and the UK are exempt from EU asylum policies under provisions set out in the 2009 Lisbon Treaty. Ireland has, nonetheless, chosen to 'opt in' to the scheme.

It bodes ill for the future that the temporary relocation mechanism was adopted by qualified majority voting in the Council, which is unusual for such sensitive topics, and was carried out to overcome considerable resistance by Hungary, the Czech Republic, Romania and Slovakia. Adding to potential future discord over resettlement, the scheme allows states to decline to relocate up to 30 percent of the number allocated under the scheme under 'exceptional circumstances'. This, after only 361 people had been relocated from Italy and Greece by January 2016. The struggle over how and whether to share the burden of asylum more fairly is thus likely to go on. The European Commission and several EU member states are likely to push for a more permanent shift in paradigm with regards to asylum procedures, while other member states may be expected to vehemently oppose any such efforts.

In the meantime, in a further move to reduce the pressure on frontline states, EU member states have also agreed that they should receive financial support to offset the costs of receiving and processing asylum claims. A first reception or 'hot spots' approach has also been adopted in particularly challenged areas in Italy and Greece to help ensure the quick identification, registration and fingerprinting of migrants, with the support of staff from other EU member states and EU border, police and asylum system agencies. However, the latter will not directly intervene in the decisions of national authorities concerning entry/refusal of entry, which could limit their effectiveness.

Pushing the border out: Coopting neighbors

Besides reinforcing its external border, the EU also tries to impede the movement of irregular migrants before they ever reach its territory. It has sought to do so through pre-border controls, undertaken not only in cooperation with EU/Schengen countries but also with non-EU countries. Outsourcing the management of migration to neighboring states that are either source or transit countries along major migration routes to Europe has also implicated them in EU asylum practices, primarily through the conclusion of agreements to ensure the return and readmission of migrants to the country from which they departed for the EU.

Expanding pre-border controls

The EU's border agency, Frontex, has played a major role in preventing migrants from reaching its actual frontiers irregularly through interception operations in cooperation with Schengen states. In response to irregular maritime migration within the current context, the geographical scope of Frontex search and rescue operations in the Mediterranean has been expanded. Frontex's Operation Triton in the Central Mediterranean, which replaced Italy's Mare Nostrum search and rescue operation, will now be extended to cover that of its predecessor. Increased support will also be given to the agency's Operation Poseidon, which assists Greek authorities in carrying out border surveillance and search and rescue operations in the Eastern Mediterranean.

The EU's external border has not just been pushed further out as a result of Frontex operations carried out in cooperation with EU/Schengen states, but also through cooperation with non-EU countries. One of Frontex's first major operations, Joint Operation Hera II, which was launched in 2006, sought to disrupt maritime irregular migration flows from the West African coast to the Canary Islands. Its mission was to stop vessels carrying migrants departing from Cape Verde, Mauritania and Senegal before they ever left the African territorial waters. This was made legally possible through bilateral agreements concluded between Spain and these countries.

Until very recently, the EU's pre-border controls had only involved Frontex surveillance and interception missions. However, increased irregular migration across the Central Mediterranean route since the Arab uprisings has led to a new development. For the first time, the EU's Common Security and Defence Policy (CSDP) is being employed in pre-border maritime control activities linked to migration. The operation not only adds a novel, military dimension to the EU's efforts to combat irregular migration, but also expands the CSDP's portfolio to include issues on the EU's Freedom, Security and Justice agenda. EUNAVFOR MED, dubbed Operation Sophia, was launched in May 2015 and entails military action to "disrupt the smuggler's business model by destroying boats and other infrastructure used by smugglers on the high seas of the southern Mediterranean". So far, this involves boarding and seizing vessels on the high seas suspected of being used by human smugglers and traffickers.

That more migrants are taking the Eastern Mediterranean and Western Balkans routes, as opposed to the Central Mediterranean one, could be an indication of the mission's success. However, the deteriorating security situation in Libya since mid-2014 is also partially responsible for the shift in the relative importance of migration routes to Europe. Operation Sophia's ultimate success could depend on obtaining a mandate to operate in Libyan territorial waters and on Libyan beaches, given that the final phase of the mission foresees the destruction of vessels, even before use, and apprehension of smugglers and traffickers. UNSC Resolution 2240, under which Operation Sophia is mandated, does not allow it to operate within the territorial waters of Libya or on Libyan soil, though. To do so, the EU would need either the consent of a future unity government in Libya or that of the UN Security Council. Establishing a unity government in Libya, let alone obtaining its consent, could take some time. Were the EU to obtain authorization from the UN Security Council, the EU could for the first time find itself carrying out a military mission on the territory of a sovereign state without its permission. Given that the latter scenario seems unlikely, the mission's effectiveness could be limited.

Outsourcing to the periphery

Outsourcing migration control practices to third countries has formed part of EU's agenda for managing migration since the late 1990s, with the initial focus being on Africa and eastern and southeastern Europe. Mobility Partnerships have provided the overall framework for cooperation between the EU and third countries. Within these partnerships, readmission agreements have been key tools in establishing a legal framework for return and readmission of nationals and non-nationals of the country of last departure before entering the EU irregularly. To increase their appeal and to incentivize third countries to abide by the obligations they imply, readmission agreements have usually been linked with visa liberalization arrangements.

Political upheavals in North Africa and the Middle East provided an opportunity to expand the transferal of the EU's migration agenda to countries in its southern neighborhood.

The revised European Neighbourhood Policy (ENP), which was designed as a new approach to a changing neighborhood following the Arab uprisings, reflected the greater emphasis placed on cooperating with third countries in the Southern Mediterranean with regards to migration. The revised ENP incorporates Mobility Partnerships, which require third countries in the EU's southern neighborhood to commit to concluding readmission agreements with the EU, cooperate with Frontex and reinforce border management capacities in exchange for visa facilitation and financial support for capacity building in the area of migration management.

Morocco, Tunisia and Jordan have concluded Mobility Partnerships with the EU. The EU also hopes to establish Mobility Partnerships with Algeria, Egypt and Libya. However, Egypt has allegedly shown no interest in doing so, and negotiations have not yet begun with Libya.

While such arrangements are outsourcing some asylum procedures to third states, the conduct of asylum procedures and the granting of asylum, nonetheless, remains linked to the territory of EU member states. Yet, even this could change. The idea that asylum applications could one day be processed in third countries is gaining traction. The idea of 'off-shore' reception centers in third countries was promoted by Britain, Italy and Germany in the mid-2000s, but never got off the ground. This has been echoed more recently when the mayor of Lampedusa and an Italian senator submitted a proposal to the European Council in October 2013 that called for the creation of asylum reception centers in North Africa. Within the current context, the European commissioner responsible for migration policy has also spoken out in favor of establishing offshore asylum processing centers. Strong supporters of the idea include Italy, France and Germany.

Stepped up use of the Eastern Mediterranean migration route in recent times has raised the strategic importance of Turkey for the EU *vis-à-vis* migration. This has led to the development of an EU–Turkey Action Plan, concluded in October 2015, under which the EU has pledged EUR 3 billion aimed at halting the flow of Syrian refugees and migrants entering the EU irregularly via Turkey. The deal includes support for Turkey's provision of temporary protection to more than two million Syrian refugees. The EU has also committed to supporting Turkey in strengthening its efforts to combat smuggling by reinforcing Turkish Coast Guard patrolling and surveillance capacity. In order to increase information exchange with Turkey on combatting smuggling networks, a Frontex liaison officer will also be deployed to Turkey.

In return, Turkey has agreed to strengthen the interception capacities of its coast guard, increase cooperation with Bulgaria and Greece to prevent irregular migration across common borders and to readmit 'irregular' migrants who do not qualify for international protection and entered EU territory through Turkey. This implies better implementing the readmission agreements that it has with both countries. Ankara has also agreed to bring into line Turkish visa provisions with those of the EU, and to combat smuggling networks through enhanced cooperation with individual EU member states and EU agencies.

A whole area of internal integration is thus becoming more and more dependent on sharing responsibilities for management of the external border and asylum system practices with third countries in the EU's neighborhood. This also means that the EU is growing more dependent on the willingness and ability of its neighbors to share responsibility for curbing irregular migration flows to Europe and by default ensuring ongoing cooperation between EU/Schengen states in the area of border control-free travel and asylum practices. But, at what price?

The periphery as enabler?

The migration crisis raises the question of whether moving further into the foreign policy domain to stem the flow of irregular migration will prove effective. Will third countries be willing and able to carry out the tasks being asked of them? The outcome is likely to be mixed. Advancing the EU's migration agenda will take place within the context of broader relations with neighbors, which differ considerably.

Persuading partners

While the uprisings and subsequent reform agendas in several North African countries have facilitated the promotion of the EU's migration agenda, the heterogeneous nature of the transitions underway in North Africa may hinder the EU's ambitions. Morocco and Tunisia have shown themselves to be the most willing partners, having started negotiations on readmission agreements with the EU. Yet, they have done so primarily because they have been eager to demonstrate their commitment to democratic reforms, both domestically and internationally. Within this particular context, the EU has found itself with considerable leverage with which to advance its interests in relation to migration and also in a way that is in line with its normative agenda.

The relative ease with which the EU has been able to co-opt Morocco and Tunisia on migration issues contrasts with their earlier resistance to concluding readmission agreements before the Arab uprisings took place, although the regime in Tunisia has changed. Negotiations on a readmission agreement were suspended with Morocco in 2010, and Tunisia had never even agreed to open negotiations. The requirement of readmitting third country nationals, as well as their own nationals, and the lack of incentives to do so was partly behind their reluctance to conclude readmission agreements. However, the political upheavals of 2010 and 2011 changed the calculations in Rabat and Tunis. The political backing of the EU gained in importance for these countries. As a result, so did the connection made by the EU between democratic reforms and cooperation on migration.

Within the revised approach to the ENP, negative conditionality was replaced with positive conditionality captured by the notion of 'more for more' – more money, more market and more mobility in exchange for more reforms. This linkage of issues contributed to the pressure that the EU could put on Morocco and Tunisia to sign up to Mobility Partnerships and negotiate readmission agreements, with provisions for third country nationals as well as nationals. For the more reform-resistant North African countries, such as Algeria and Egypt, this strategy is visibly less effective. This is all the more the case, given that both Algiers and Cairo are less dependent on the EU not only for political support, but also for financial assistance, due either to hydrocarbon resources of their own or Gulf aid.

The verdict is also out as to whether the benefits entailed in Mobility Partnerships with the EU will be enough to sustain support for its migration agenda. After all, Mobility Partnerships still emphasize temporary mobility over longer term legal migration to the EU, while the EU's partners are more interested in the latter. What is more, the EU's focus on a control-oriented agenda is unlikely to change dramatically in the coming years, given the highly politicized and securitized nature of the migration debate in Europe. To top it off, even the temporary mobility on offer depends on the voluntary commitments of individual EU member states, and this is far from given. The EU's promise of more 'mobility' for the citizens of third countries that sign up to Mobility Partnerships may thus ring increasingly hollow.

Should the idea of establishing offshore centers for processing asylum applications come to fruition, transit countries could become magnets for asylum seekers from their neighborhoods. Some people whose asylum applications have been rejected may be reluctant to return to their home countries and stay in transit countries. To persuade third countries to accept such a fate, the EU may need to offer a great deal in return.

Dealing with Turkey – Ankara's cards

Turkey is a transit state that has found itself in a position of strength and able to leverage its relationship with the EU to obtain benefits on the basis of common interests rather than reforms. Being a key transit state on the main migration route to the EU while not dependent domestically or internationally on EU support for a reform agenda, Turkey has been able to extract several important concessions from the EU in exchange for its help in combating irregular migration. Its major prize has been to 'reenergize' the accession process by opening a chapter on monetary and financial policy. The fact that this has been agreed at a time when Turkey is witnessing a 'democratic rollback' is testimony to the increased strategic importance it now holds for the EU, in addition to the latter's lack of ability to advance its interests under the guise of a normative agenda. Should the EU adopt a regulation on 'countries of safe origin' (including Turkey) to which their citizens could be returned, this would amount to turning a blind eye to Turkey's lackluster human rights record and its treatment of the Kurds.

From the Turkish vantage point, the deal offers a chance to restore its image with Europeans, which had been damaged as a result of backsliding in relation to political pluralism within the country and its ambiguous Syria-related policies. The Turkish government's suppression of opposition, the media and minorities suddenly seems of secondary importance, compared to Ankara's ability to curb the influx of migrants. Ankara also has an interest in implementing the deal to speed up visa-free travel of Turkish citizens to the Schengen area. This is not a done deal, however. It will depend on Turkey following through on its promise to implement the readmission agreement it concluded with the EU in 2013, as well as harmonizing Turkish visa requirements with those of the EU.

Questionable capacities

In addition to the price of incentives, there is also the issue of capacities. Some partner countries may struggle to play the expanded roles being asked of them in relation to obstructing irregular migration towards Europe and readmission of those that have already reached the EU. The EU's southern neighbors in North Africa tend to lack control over their remote borders, as well as areas of their territories. It is precisely these types of ungoverned spaces that have given people smugglers opportunities to flourish. In this regard, the challenges facing Libya are formidable, though its institutional capacity to strengthen border controls and disrupt migrant smuggling are unlikely to improve dramatically over the short term or even medium term.

Concerns about adequate reception conditions, as well as respect for international conventions linked to the protection of refugees, also loom large with regards to some key transit countries in the EU's neighborhood. While the situation within North African countries differs, the victims of human trafficking and asylum seekers have been known to have been detained in prisons alongside traffickers and may not even be granted access to an asylum process. Expulsions at borders, including under inhuman conditions, in some countries in North Africa have also been reported. Asylum seekers are also sometimes sent back to their countries of origin, even when these countries may be unsafe, in violation of the principle of *non-refoulement* set out in the 1951 Geneva Convention on Refugees and the associated protocol.

The deal with Turkey poses no less of a risk to the rights of those seeking asylum. Turkey already hosts more than two million Syrian refugees. While it is party to the 1951 Geneva Convention on the protection of refugees and its associated protocol, it still maintains a 'geographic limitation' clause, which means it considers asylum claims from European nationals only. Placed under increased pressure to prevent people arriving irregularly in the EU via its territory, the temptation to send back asylum seekers from Syria, Iraq or elsewhere could trump granting them temporary protection as it has done so far. Indeed, since the deal with Turkey was struck, reports of asylum seekers being mistreated and sent back to the countries from which they fled, including Syria and Iraq, point in this direction.

To be sure, the EU is not unaware of the danger that may be faced by those in need of protection as a result of return and readmission mechanisms, linked both to joint Frontex maritime patrols in the territorial waters of third states and readmission agreements. It recognizes both the need and the potential leverage provided by offering financial assistance to partner countries to improve reception conditions, and has been considering requiring third countries to abide by international protection standards and to strengthen the capacities of third countries. Yet, adequately monitoring reception conditions and international protection standards remains a formidable challenge. So, readmitted third-country nationals could still find themselves in a vulnerable position in countries where human rights' systems, including those linked to international protection, are weak.

Conclusion

All in all, the migration crisis is acting as a catalyst for the further externalization of the EU's migration management agenda. This, in turn, is prompting the use of a wider variety of foreign policy tools to curb irregular migration to the EU, not least the CSDP, which is being drawn closer to the Union's Freedom, Security and Justice dossier. Through Operation Sophia, the CSDP's portfolio now contains a migration component, which is a new development.

While no one would deny that there is a need to address the external dimension of irregular migration, doing so does generate dilemmas for the EU as a foreign policy actor that have yet to fully play out. It could imply unforeseen shifts in relations with third countries, for better or worse. In its bid to enlist the help of third countries, the EU may have to make significant concessions that are at odds with its values and normative agenda. This is likely to be the case should reform-resistant third countries also be key transit countries, Turkey being a prime example.

Additionally, outsourcing border control and asylum practices to non-EU countries has the effect of externalizing some of the key problems blighting the Schengen and Dublin Systems, notably those linked to reception and protection standards. Appointing third countries as the EU's gatekeepers may place the rights of migrants at risk, pointing to yet another way in which the EU's normative agenda could be compromised.

Ultimately, acute irregular migration, which is unlikely to ease up anytime soon, will require EU foreign policy engagement that goes well beyond measures aimed at regaining control of the external border. There has been a great deal of talk about the need to address the root causes of the migration crisis, such as conflict and endemic instability in the neighborhood. But words need to be translated into action.

CHAPTER 3

Power Politics in (Eur)Asia

Prem Mahadevan

China is shaping its policy towards maritime disputes in Southeast Asia partly with a conviction that Western security efforts will remain concentrated against Russia. Its activities in the South China Sea resemble a maritime version of hybrid warfare. The US is keen to limit Chinese unilateralism by strengthening regional allies. However, Washington is also preparing to take a more prominent role in managing tensions.

A carriage of the Trans-Siberian No. 3 on the Beijing-Ulan Bator-Moscow route, May 2012. China's ambitious plan for a Silk Road Economic Belt, connecting European and Chinese markets by means of high-speed railways passing through Central Asia, will rely partly on Russian goodwill.

Tensions between the United States and China are escalating. No longer is Washington a mere observer of maritime disputes in the South China Sea. Rather, it is a concerned actor. Recent Chinese actions indicate that Beijing wishes to unilaterally redraw political boundaries. The destabilizing factor is the appearance of seven artificial islands, constructed over the last three years, around which China is attempting to claim territorial waters. In effect, China is waging a maritime version of hybrid warfare, to impart political ballast to its anti-access/area denial (A2/AD) doctrine.

There is consistency on the part of both major powers. Beijing wants to limit the American naval presence in China's so-called 'near seas'. Washington wants continued access to these waters. Besides international law, what is at stake is the United States' geostrategic advantage and the credibility of its alliance system, as reflected in its military relationships with Taiwan, Japan, South Korea and the Philippines. If China can contest the US Navy's freedom to sail through the South China Sea, it would accomplish three objectives simultaneously. First, it would better protect its Sea Lines of Communication (SLOCs) to oilfields in the Persian Gulf and Africa. Second, it would gain partial control of the 'first island chain' that constrains its naval profile in the Indo-Pacific region. Third, it would crystallize doubts among American allies as to whether hedging against a rising China – which they are currently inclined to do – is a wise policy.

For its part, the United States faces a crisis of credibility *vis-à-vis* its regional allies. With Russian actions in Crimea and Eastern Ukraine having once more drawn the Pentagon's attention towards Europe, and the 'Islamic State' posing a challenge to Middle Eastern stability, few Asian governments are banking on the longevity of the American military 'rebalance' towards Asia. They are aware of substantial cuts that American defense spending is likely to encounter over the next few years. The Obama administration is seen as risk-averse in matters of foreign policy, a belief strengthened by its failure to respond to the Syrian regime's employment of chemical weapons. Meanwhile, Beijing seems poised to benefit from slowing-but-still-formidable economic growth that will bolster its claims to hegemony in Asia. High expectations are riding on its One Belt, One Road (OBOR) initiative, which could accomplish what Russia has long sought to do: drive a wedge between the United States and Europe.

The most salient feature of current Chinese foreign policy is the manner in which relations with the US are souring over maritime disputes in Asia, while those with some European Union members are blossoming. There is an inherent tension in how China approaches the broader Western community of states, which can be described as 'geopolitics versus geoeconomics'. However, differentiating between the medium and long term is necessary, as there is speculation that the ongoing slowdown in the Chinese economy would foster domestic instability in case China falls into the 'middle income trap' that plagues many developing countries. It is also uncertain whether the Chinese military can count on receiving double-digit budget increases every year, especially once competition for funding increases from the internal security agencies.

This chapter provides a pan-optic view of great power relations in Eurasia since 2014, before focusing on their local impact in the South and East China Seas. It will first outline how Russian actions in Eastern Europe have overshadowed similar Chinese tactics in East Asia, and driven Moscow into a state of quasi-dependency on Beijing that will work in the latter's favor even as China bolsters its international standing without backing down on maximalist maritime claims. Thereafter, the chapter will turn to the claims themselves and elaborate on their present trajectory. Lastly, the chapter will discuss how the United States and its allies are preparing to deal with an anticipated increase in Chinese assertiveness.

Russia meets China, in Europe

In September 2013 Chinese President Xi Jinping announced plans to create a Silk Road Economic Belt that would connect China with Western Europe via Central Asia. High-speed passenger and freight railway lines would supplement Russia's ageing trans-Siberian railway as the artery of overland trade in Eurasia. Closer to home, China would integrate its rail network with Southeast Asia by constructing new lines in Vietnam, Cambodia, Laos and Thailand. Accompanying this would be a parallel effort to strengthen maritime connectivity with members of the Association of South East Asian Nations (ASEAN). Initially announced in October 2013 as the Maritime Silk Road, the latter's scope was expanded eleven months later to include the countries of South Asia.

The Ukrainian crisis of late 2013 and the subsequent Russian intervention in 2014 strengthened China's negotiating position *vis-à-vis* its northern neighbor. Previously, Moscow had been either indifferent to, or suspicious of, Chinese keenness to conclude energy deals, seeing them only as a bargaining chip in Russia's own negotiations with the European Union. However, once American and European sanctions were imposed in 2014, Russia courted China as a long-term business partner. Beijing leveraged this desperation to extract a generous gas deal, but the 2015 slowdown in the Chinese economy, together with sharp depreciation of the ruble, undercut the potential for increasing bilateral trade. Instead, China is now looking towards Central and Eastern European (CEE) countries to serve as its connector to the European Union, a role that these former communist states are eager to fulfill.

Even as the United States fulminated about Chinese intransigence in the South China Sea, many of its European allies were signing up to a Chinese-led project, the Asian Infrastructure Investment Bank, which would fund the OBOR scheme. Having expected mainly to win support from governments in the global South, Beijing was pleasantly surprised by the eagerness of European Union members to join the bank in the hope of receiving economic favors. The alacrity with which the United Kingdom in particular, signed up to the AIIB and sought to position itself as China's top lobbyist in the West was a disappointment for both the United States and Japan, and a diplomatic coup for China.

China seems to be using its economic heft to play a game of 'divide and conquer' against the Western alliance, and achieving a measure of success that has eluded Russia. Whatever trans-Atlantic consensus exists on Ukraine disappears when the issues at stake are the South China Sea and Chinese investment into sluggish European economies. Considering that China asserts 'indisputable' sovereignty over most of the Sea, despite this claim having no basis in current international law and being actively disputed by the Philippines and Vietnam, the comparison (and contrast) with Ukraine is pronounced. Beijing is backing its claim with shows of force on the water through coast guard patrols. It has commissioned the largest coast guard cutters in the world, whose size dwarfs even many American warships. Short of a shooting engagement, where the Americans' superior firepower would be decisive, the cutters' size allows for effective harassment of other countries' ships inside Chinese-claimed waters.

With the consolidation of five maritime law enforcement agencies into a single force in 2013, China now possesses the largest coast guard fleet globally. It also has the world's largest merchant and fishing fleets. Elements of the latter are travelling as far as the coast of West Africa and are engaging in large-scale fishing which is damaging to the economies of littoral states and maritime ecosystems. Their operations provide Beijing with plausible grounds to stand ready to 'protect' Chinese nationals far from home shores, even in waters that lie inside other countries' exclusive economic zones. Meanwhile closer to home, the Chinese Navy is broadcasting to passing ships and aircraft in the vicinity of Chinese-claimed features in the Spratlys that these craft are intruding on sovereign territory and must leave immediately.

There are parallels between Chinese military settlements on artificial islands and the 'little green men' who appeared in Crimea during the spring of 2014, prompting the territory's subsequent annexation to Russia. In both cases, the initial effort to alter the status quo was cloaked in defensive rhetoric that supposedly conformed to international norms. But there was a key difference: Whereas Russia denied that its forces were engaged on what was then Ukrainian territory, China did not disown its reclamation activities in the South China Sea. It did, however, mask its intentions, leaving the West to learn about the construction of military airstrips, harbors, radar and wireless installations through satellite imagery. A review of Chinese media coverage suggests that Beijing has taken a strong interest in how the West responds to territorial pushback from Russia. During the Russo-Georgian War of 2008, state-controlled reporting in China portrayed the conflict as a struggle for influence between a defensive Moscow and a rapacious United States seeking to bypass Russian dominance on Central Asian energy supplies by cultivating puppet states. Once the Ukrainian crisis erupted in 2013/14, Beijing was similarly quick to signal support for Moscow through its media. Apparently, on both occasions China calculated that the distant precedent of a nuclear power unilaterally imposing territorial changes through a combination of force and dissimulation would be useful for legitimating similar methods in its own backyard.

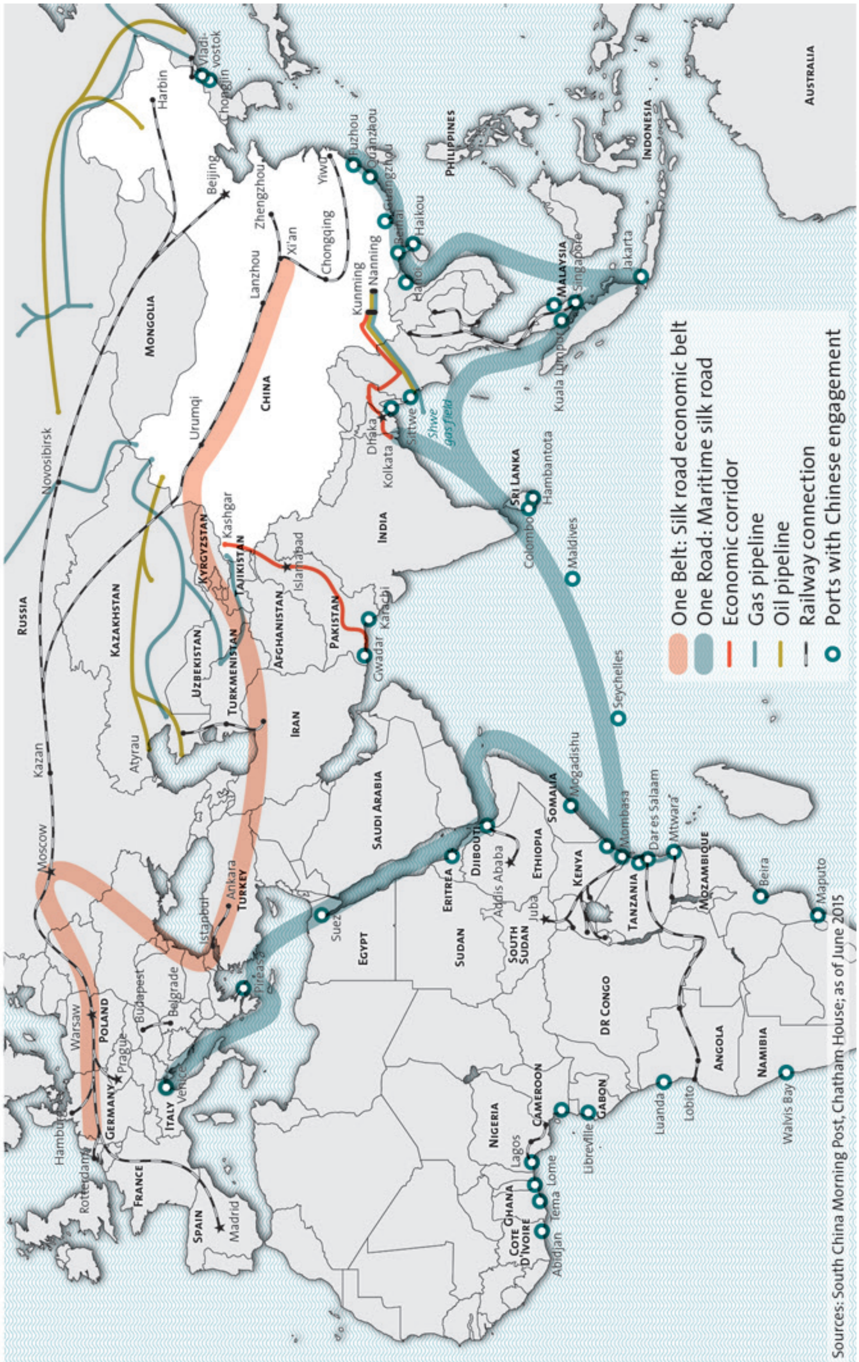
According to one assessment, the Chinese leadership has concluded that the Ukrainian crisis would give China an additional ten years to consolidate its claims in the South and East China Seas before any strong countermeasures are taken by the United States. Statements by top-ranking American officials that Russia constitutes the primary security threat to the US have pleased Beijing. It now hopes that Washington will have to split its attention between the Atlantic and Pacific naval theatres, as NATO members demand assurances of continued American commitment to their security.

The Sino-Russian dyad is a crucial influence on China's behavior towards its Asian neighbors. Just as the diminished risk of land invasion from the Soviet Union emboldened Beijing to concentrate on building up its navy after 1985, so does the contemporaneous state of Russia-NATO relations shape its assessments of American pressure in the Indo-Pacific. Just as Russia has employed energy as a geopolitical instrument against the EU, so too does China dangle an economic carrot (and stick) to tempt European governments into dealing bilaterally with it, bypassing Brussels and ignoring Washington. Since 2007, it has used threats of closing off market access to deter international oil exploration in Vietnamese and Philippine waters. British Petroleum was the first major company to succumb to such pressure, a success which convinced China that the West would prioritize profit over principle, especially as the aftershocks of the 2008 economic crisis became evident. The OBOR initiative has now given China a mechanism for exporting its surplus industrial capacity (and incidentally, mitigating the effects of the economic slowdown) while buying influence overseas. By 2049, OBOR is expected to reach 65 countries, which presently account for 55 percent of global GDP, 70 percent of global population and 75 percent of proven energy reserves.

With its creation of the '16+1' format to emphasize relations with former communist states in Europe, China is making substantial inroads into EU politics, much to the irritation of the Brussels bureaucracy. There are concerns that Beijing is playing off East-West differences between old and new EU members in order to gain political cover for its domestic human rights record and foreign policy in East Asia. But there are also reasons for Central and Eastern European states to be responsive to such overtures. Disappointed by the failure of EU accession to transform their economies swiftly enough, they are looking to China as a possible source of job generation. The statistics are both promising and suggestive: Trade between China and the 28-member bloc presently stands at 600 billion euros per year, and is expected to reach a trillion euros within five years. Fourteen EU member states are founding members of the AIIB, and the UK has agreed to Chinese investment in the construction of up to three nuclear power plants, a deal which would be unthinkable in the United States because of security concerns.

An important side-story is the interlinking of railway lines between Chinese and European cities. Since 2013, trains have been running partly on the infrastructure of the trans-Siberian

One Belt, One Road



Sources: South China Morning Post, Chatham House; as of June 2015 line, introducing a rapid and inexpensive freight option to existing ones: air (fast but costly) and sea (slow but cheap). Although only 3.5 percent of China-EU trade occurs by land, despite the journey taking one-third the time as a sea voyage, this would change if China succeeds in coopting Central Asian states to host its expanding transport infrastructure. At the western end of the railway lines, the promise of fast connections to Beijing has Warsaw, Prague and Budapest jostling to be China's preferred transit hub with the rest of Europe. The only major hurdle in this design would be a cooling of relations with Russia, which could occur if the EU eases sanctions on Moscow and allows the Kremlin to start reasserting Russia's traditional dominance in Central Asia. Short of such an eventuality, the supporters of OBOR hope that it would become as crucial in shaping the geopolitics of the 21st century as the American Marshall Plan was to the 20th. Key to this process is the health of the Chinese economy, and whether Beijing would be able to export its domestic manufacturing surplus in the form of overseas contracts for infrastructure creation. To do so, it needs a steady supply of oil.

Mixing oil and water

As far as China is concerned, the South China Sea could constitute a 'second Persian Gulf' and provide 30 years' worth of hydrocarbons to fuel economic growth. Just where this estimate came from remains a mystery – Western experts believe that hydrocarbon reserves in the Sea are probably not as high as China expects and are likely to be found outside the waters claimed by Beijing. Even so, the intertwining of national sovereignty, energy security and bureaucratic self-interest has become so strong over the last two decades, ever since China became a net importer of petroleum products in 1993, that it has assumed a momentum of its own. At its leading edge is China's infamous 'nine dash line'.

The line dates back to 1936, a time when nationalist China was fearful of both Japanese and French expansion on its periphery and pre-emptively claimed 80 percent of the South China Sea as a buffer zone, along with 159 islands and islets. The line was a statement of intent rather than of fact, since China did not possess the naval capacity to enforce its claims to either the islands or the surrounding waters. In 1974, it carried out its first territorial seizure when it wrested the Crescent Group of the Paracel Islands from Vietnam, having already occupied the nearby Amphitrite Group unopposed. Beijing had picked its moment well: Knowing that South Vietnam was preoccupied with its civil war against the North, and that the United States was keen to balance against a revival of Soviet power in Southeast Asia following the anticipated North Vietnamese victory, it calculated the risk was minimal.

Between 1974 and the next outbreak of fighting in 1988, the international legal environment changed fundamentally. The 1982 United Nations Convention on the Law of the Sea (UNCLOS) explicitly set a standard regarding the rights of coastal states. Islands capable of sustaining human habitation were entitled to 12 nautical miles of territorial waters plus 200 nautical miles of Exclusive Economic Zone (EEZ), where the state which claimed physical possession of the island would have access to marine resources in the water and under the seabed. Rocks that lay above water at high tide received 12 nautical miles but no EEZ. Low-tide elevations which were mostly submerged received no privileges other than a 500-meter safety zone. Reclaimed islands built on low tide elevations (this includes all the islands recently constructed in the Spratlys by China) were only entitled to this same 500-meter safety zone.

Under these rules, which China ratified in 1996, the historical rights derived from Beijing's adoption of the 'nine-dash line' would be overridden by a common set of norms that govern every UNCLOS signatory. Yet, China has persisted with its expansive claims, making them official in a map submitted to the United Nations Commission on the Limits of the Continental Shelf in 2009. Furthermore, it is interfering with the ability of marine traffic to come within close proximity of the seven artificial islands that it has constructed on low tide elevations in the Spratlys. While not explicitly claiming that the islands have generated new territorial waters or that the whole of the South China Sea within the nine dash line is China's EEZ, Beijing repeatedly asserts that it has 'indisputable sovereignty' over the Sea. A major cause of concern for China's neighbors and the United States is the combination of extent and vagueness inherent in this claim. Together with the growth of the Chinese shipping industry – ship construction has increased 13-fold in the last decade – Beijing can use the nine dash line to redraw international boundaries unilaterally. It had already seized Johnson Reef in 1988 after a battle with Vietnamese forces (another well-timed offensive, planned for a moment when Vietnam was diplomatically isolated) and in 1995, surreptitiously moved onto Mischief Reef near the Philippines.

The manner in which China occupied Mischief Reef raised the first suspicions about its long-term intentions in the South China Sea. Previously, its offensive actions had solely been directed at Vietnam. But when the Philippines, an American ally and ASEAN member, found that a body of water traditionally visited by its fishermen had been declared off-bounds by Chinese vessels and was the site of military construction, wider concerns were echoed. China's response was almost identical to that associated with the term 'hybrid warfare' nowadays: Beijing at first denied any of its boats were near Mischief Reef. When confronted with photographic evidence, it changed its explanation to admit that maritime law enforcement agencies were in the area, but not Chinese naval vessels. Subsequently, it modified this story as well to acknowledge that the Navy had participated in the occupation, but claimed that this was the work of junior officials who acted without orders. Considering that a significant degree of logistical support for the Chinese occupation was manifest, this line of argumentation carried little credibility with the Philippine government or anyone else. However, without an act of overt aggression involving loss of life, as Vietnam had experienced, Manila could not count on American military support in its confrontation with China and had to reluctantly accept the new status quo. Beijing refused to discuss the matter in regional forums and bilaterally offered joint oil exploration – the likely trigger for the occupation itself had been the Philippines' prospecting activity near the reef. Since this would have amounted to recognizing Chinese territorial claims in a part of the South China Sea which had long been free of disagreements, the Philippine government refused the offer.

A similar pattern of creeping encroachment is now evident in the waters around China's artificial islands. No regional navy has the potential to withstand a confrontation with the Chinese Navy. Yet, accepting the new islands as entitled to territorial waters would not only flout UNCLOS, but would indirectly enhance China's long-standing opposition to American surveillance of its shores. The issue here is that China believes that maritime intelligence collection cannot be carried out within its EEZ, although UNCLOS does not explicitly prohibit this. The US has been forthright about its desire to track Chinese naval deployment and force posture by overflights and sailpasts from within the 200 nautical mile EEZ off the Chinese mainland. In 2001, a crisis arose after a US surveillance aircraft even collided with a Chinese fighter jet. If the newly reclaimed islands in the South China Sea are allowed to generate territorial waters, there would be little to stop Beijing from claiming an expanded EEZ around them by citing its 'indisputable' nine dash line. This EEZ could then be closed off to US naval vessels as the Chinese Navy grows more capable of long-distance operations and ventures into the Indian Ocean, ostensibly to guard the infrastructural investments that would accompany the Maritime Silk Road.

Although China denies that it intends to set up naval bases along the Indian Ocean rim, its sustained interest in gaining upstream control over energy supplies would necessarily draw its navy closer towards the Persian Gulf and Africa. There has been speculation that Beijing might set up as many as 18 bases, mostly in South Asia and along the east coast of Africa, to protect its SLOCs. The fact that China is building civilian ports in many countries along the oceanic rim has raised concerns about possible dual usage. The Chinese Navy would not need a large local footprint in order to operationalize an overseas base, if it already has Chinese state-owned companies waiting to receive its ships in harbor. Djibouti on the Horn of Africa has become significant in this regard: Already host to American, French and Japanese ships, it is likely to become the site of China's first overseas naval base.

Timescales are crucial. No one is predicting anytime soon that China would physically interfere with American maritime surveillance, or establish naval bases far from its shores. But the shock generated by the rapid appearance of seven artificial islands in the Spratlys has made observers wary of absolutist predictions. Within a matter of two years, Beijing reclaimed 20 times as much land from the seabed as all other littoral states had over the previous four decades. It has constructed airstrips and harbors which could serve as forward deployment positions for naval aviation as well as surface and subsurface fleets. For instance, it is believed that China prioritized the reclamation of Fiery Cross Reef – which it first occupied in 1988 ostensibly for the purpose of scientific research – in order to build submarine pens there. With its Yalin naval base on Hainan Island located in shallow waters, subsurface assets of the Chinese South Sea Fleet were exposed to both peacetime observation and potential wartime strikes. Fiery Cross Reef is a possible alternate site due to the depths of its surrounding waters and proximity to the Straits of Malacca, a likely energy chokepoint that the US Navy would seek to exploit in the event of hostilities.

Sporadic rebalance

The US 'pivot to Asia' (subsequently branded as a 'rebalance' in order to convey greater durability) was partly triggered by China's anti-satellite missile test in January 2007 and simultaneously by the impending American drawdown from the Middle East. At the time, relations with Russia were frigid but far from hostile, with the Russo-Georgian War yet to occur. This left Asia as the logical theater in which US combat forces would likely have to fight in the future.

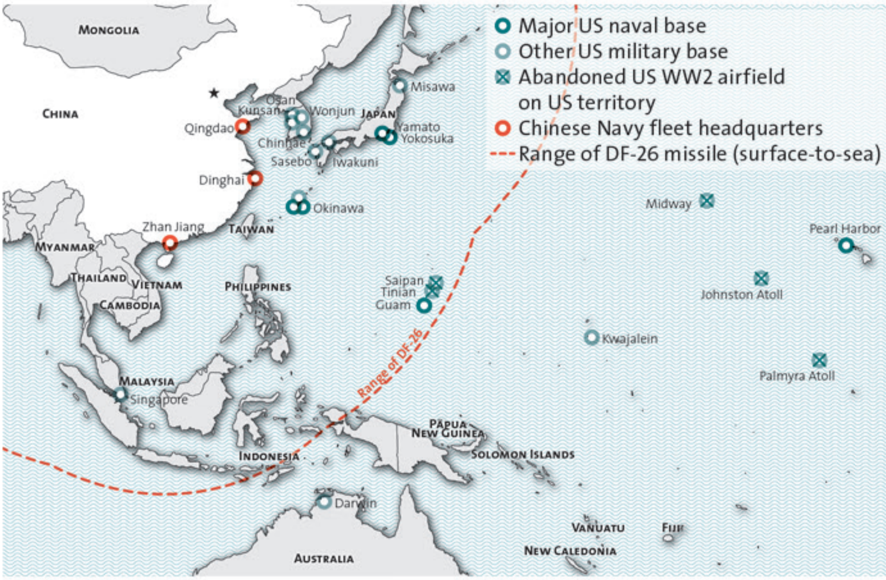
To maintain its dominance in the Pacific Ocean, the US Navy relies on two types of strategic assets: Satellites for communications and imagery intelligence, and on aircraft carriers. The Chinese missile test of 2007 and the development of anti-ship missiles, especially the DF-21D (dubbed the 'carrier killer') and its successor the DF-26, threatened both these asset categories. As the range of Chinese ballistic missiles increased, the infrastructure undergirding America's war plans in the Pacific would be jeopardized and possibly made redundant. Anticipating this, from summer 2008 the US government began to assert that it had an abiding interest in Asia. China's internationalization of its nine dash line in May 2009, when it made its submission to the UN Commission on the Limits of the Continental Shelf, gave Washington an advantage in its search for security partners.

The Asia Pivot/Rebalancing, at its core, aims to resurrect old alliances and establish new partnerships. The goal is to either steer Chinese behavior to conform to international norms or, if that fails, to contain the potential for aggression. Since the end of the Cold War, US basing arrangements in Asia have been political liabilities, stoking resentment among local populations in Japan and the Philippines. The rebalancing would avoid a heavy infrastructural footprint, instead relying on surge capacities to host US air and naval assets in the event of hostilities, while building up a stronger presence in American overseas territories in the Pacific. Considerable effort has been put into emphasizing the flexible nature of US basing agreements, both to assuage local politics and to keep the Chinese uncertain about how to orient their campaign planning. Forward deployments are considered necessary for the American naval force posture because average sailing time from the US west coast to East Asia would likely exceed ten days – too long for Washington to effectively intervene in a regional crisis.

There is general agreement among security experts that the South China Sea is only the outer layer of a larger security problem facing the US: guaranteeing the security of Taiwan and Japan. Since 1996, the Chinese Navy has planned for a Taiwan-related confrontation with its American

Map of power in the Pacific

Selected US military bases and Chinese projection of power, as of 2015



Sources: Stratfor, Economist, Reuters, defensetech.org, militarybases.com

counterpart, using asymmetric tactics and technologies. China's anti-access/area denial concept builds on ideas developed by the Soviet Union during the Cold War. The intention is to keep the US Navy as far from Chinese shores as possible by relying on submarines and land-based airpower and missilery. For its part, the US has developed its own doctrine to hit the Chinese mainland in the event of an onshore threat to the Pacific Fleet. Known initially as Air-Sea Battle, it has now been rechristened 'Joint Concept for Access and Maneuver in the Global Commons' (JAM-GC).

The new Chinese-occupied islands in the South China Sea are not a serious military obstacle to the US Navy – any threat they pose could be eliminated through ship-launched missiles. However, they serve as a diversion that will consume at least some of the ordnance which would otherwise be used in a Taiwan contingency. Vertical Launch Systems (VLS) onboard American surface and subsurface vessels cannot be reloaded at sea. Once fired, they remain empty until the vessel calls at a friendly port. By increasing the sortie range of its land-based airpower and missile shield, China hopes that in a war involving Taiwan the US Navy will have to expend a larger percentage of its munitions merely protecting its assets than interfering with amphibious landings by Chinese ground forces.

On the other hand, China cannot expect an easy takeover of Taiwan as long as US security guarantees to the island remain in place. Beijing has warned that any political steps towards the assertion of Taiwanese independence, or even inordinate delays about reunification with the mainland, could constitute a *casus belli*. With the victory of the independence-inclined Democratic Progressive Party (DPP) in the January 2016 Taiwanese general election, cross-strait relations are likely to become chilly. A formal declaration of independence seems most unlikely in the foreseeable future, but anti-mainland sentiment has been mounting for some years in Taiwan and the DPP's electoral success reflects this.

Taiwan has little capacity to resist an invasion for long; at most, its small armed forces can only stall a Chinese invading force long enough for the United States to intervene militarily. This is where the doctrinal race between A2/AD and JAM-GC becomes crucial. Although the Chinese Navy is larger than its American counterpart in terms of hull numbers, its ships are at least two technological generations behind. Beijing is trying to make good on this deficiency by spending on capability upgradation: Between 2004 and 2011, the percentage of modern units in its surface fleet increased from 10 to 30 percent while the corresponding change in the submarine fleet was from 10 to 50 percent. The US can offset the enhanced threat to its Pacific fleet by reactivating old naval and airbases in Southeast Asia (which it has already begun to do in the Philippines) and forward airfields in the Pacific.

The standoff regarding China's newly reclaimed islands is thus a sideshow to the bigger question of whether the US Navy will continue to have unrestricted rights to sail through East Asian waters, several years into the future. Few Asian countries are willing to bet completely on this. Japan in particular feels vulnerable due to its long-standing dispute with China over the Senkaku/Diaoyu Islands in the East China Sea. Like the Spratlys and Paracels, the real issue is not the status of the islands themselves, but the possibility that the surrounding seabed is rich in hydrocarbons. China's interest in the Senkakus/Diaoyus was prompted by a 1968–69 survey which suggested oil and gas finds in the area. For many years, the weak state of the Chinese Navy (traditionally the lowest priority for military spending among the armed forces) precluded any assertion of Beijing's claim. The islands therefore remained under Japanese administration. Starting in 1999, Chinese naval vessels began to conduct maneuvers in their vicinity. Since 2008, Chinese ships have routinely breached the 12 nautical mile territorial seas that possession of the islands gives Japan. Fighter aircraft have conducted overflights with increasing frequency, to patrol an air defense identification zone (ADIZ) that overlaps with Japan's, prompting Japanese fighters to scramble in response. Japan has accused China of reneging on an agreement to jointly develop hydrocarbon resources in the East China Sea, by building gas platforms near the equidistance line between the two countries (which have not yet agreed on EEZ delimitation).

In September 2015 Japan passed legislation to permit the overseas deployment of forces in support of allies (read: US). This move was criticized domestically but viewed as a necessary step towards tying the US closer to Japan's security. Washington has asserted that although it takes no position on sovereignty issues, the Senkakus/Diaoyus are covered by the mutual security treaty of 1960, which means that a Chinese attack might provoke an American response. Tokyo feels that it must take a firm stand on the islands, having already lost the southern Kuriles to Russia and the Dokdo/Takeshima islands to South Korea following its defeat in World War II. Japan is as dependent on energy imports as China and the prospect of oil and gas fields in the Senkakus is sufficiently attractive for the Japanese government to remain firm on retaining them. Accordingly, it has begun efforts to raise a marine assault capability and expand its Maritime Self-Defense Force (already one of the most sophisticated navies worldwide) by acquiring more submarines and aircraft. However, it is unclear whether even this enhanced posture would succeed in repelling a Chinese occupation of the islands after a 10–15 year timeframe, as China continues to expand and modernize its navy. The alliance with Washington is thus crucial. With Sino-Japanese relations being clouded by historical animosity dating back over a century, the island dispute in the East China Sea is more publicly emotive than those in the South China Sea.

The US, for its part, is encouraging its allies and partners to cooperate more with one another, as part of a burden-sharing process that would both deter China from attacking any single disputant and facilitate a common response if hostilities erupt. Thus, it is tacitly approving Japanese efforts to boost the patrolling capacity of the Vietnamese and Philippine coast guards through donating ships. Joint exercises with these countries, as well as India and Australia, are becoming more common. To challenge Beijing's effort at claiming territorial waters around its artificial islands in the South China Sea, Washington has authorized freedom of navigation operations (FONOPS) which assert the right of US ships to sail anywhere outside internationally recognized territorial waters. The first FONOP, conducted in October 2015, was shadowed by an American carrier group, just in case the Chinese response would be escalatory. Although China strongly criticized the maneuver, it avoided direct confrontation. This would almost certainly not be the case if Japan were to carry out its own FONOP in the Spratlys, as occasionally suggested in media reports. Chinese pressure therefore acts as a brake on how far US allies can go in antagonizing Beijing, as long as overt hostilities do not break out.

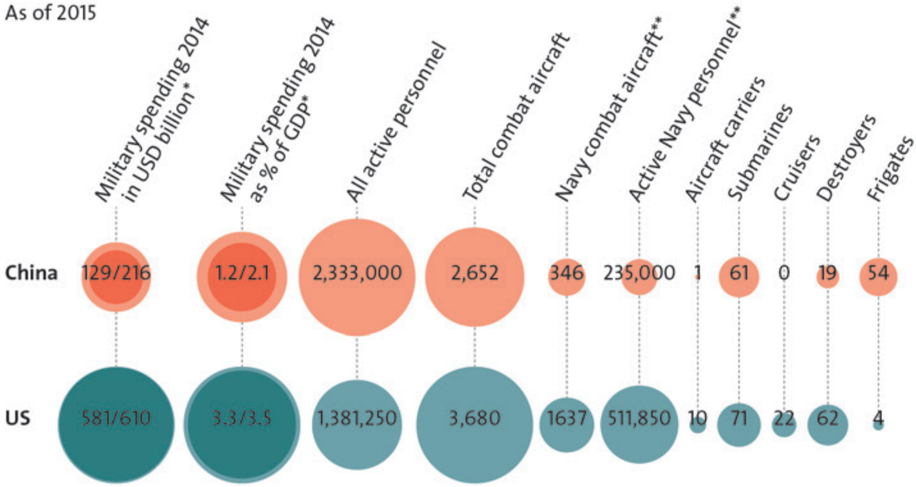
To some extent, China is testing American resolve already. Nearly two months *before* the US FONOP in the South China Sea, five Chinese naval vessels sailed close to the US-administered Aleutian Islands in the Pacific. Whether this was intended for domestic consumption, to suggest to an indignant Chinese public that the forthcoming American move was only a 'response', is unclear. Some analysts speculate that China might in fact have hoped for American pushback in the Spratlys, which would give it an excuse to further strengthen its military footprint on the islands. What is clear though is that Beijing is not afraid of challenging the US on the finer points of international law. While it objects to military craft entering its own EEZ, since 2013 it has been sending Chinese Navy vessels (including Type 815 spy ships) into the American EEZ around Guam and Hawaii. It has also exercised the 'right of innocent passage' inside US territorial waters. Thus, at a perceptual level, China is prepared to match the United States, move by move, in a slow-paced contest for legitimacy and naval presence across the Pacific.

Expectation (or superstition?) of change

Military reforms announced by Beijing in September 2015 point to the future: Chinese ground forces will be downsized and more funds freed up for the Navy and Air Force. China is counting on Russia's economic dependency to scale down the size of its army and devote greater attention to the likely theater of conflict: the 'near seas'. Chinese President Xi Jinping

US-China military balance

As of 2015



* low: IISS estimate; high: SIPRI estimate
** US: including Marine Corps

Sources: IISS Military Balance 2016, SIPRI, World Bank

has proven uncompromising on maritime disputes – the first US FONOP took place shortly after a meeting with US President Barack Obama, during which no understanding could be reached regarding artificial islands in the Spratlys. Xi has associated himself closely with the military reforms and is likely to compensate for their unpopularity with the army by taking a firm stance on issues that interest the other services. He would have the weight of public opinion behind him: With Chinese expatriates coming under threat from terrorist groups and political rebellions abroad, the government has been looking to strengthen its expeditionary warfare capability. The 15,000 strong marine force, which is under the command of the Navy's South Sea Fleet, has lately been training for desert operations – a sign that China is not going to let itself be confined to the Pacific rim. The likelihood that Chinese and American ships will shadow each other on the high seas while on training and humanitarian missions seems strong. However, this need not necessarily lead to an escalation of tensions, unless China makes further efforts to enforce its nine dash line. In the event that it does so, China's enhanced capability for force projection would ensure that the US Navy and those of American allies would have a formidable, but still manageable, opponent to confront.

With a US presidential election looming in 2016, there is a belief that coming months will see major changes in the Sino-American geopolitical contest. One forecast holds that Beijing may want to trigger a limited-scale crisis with Japan over the Senkakus/Diaoyus, as a way of humbling Tokyo and demonstrating Chinese power while the US is preoccupied with domestic politics. Another scenario could be one of growing tensions between China and Vietnam, especially as China recently moved an oil exploration rig into Vietnamese-claimed waters in the South China Sea. Unlike an earlier crisis in summer 2014, this time China has been less overtly provocative in its placement of the rig, which raises concerns about whether it intends to keep the rig in place despite Vietnamese protests. Its economic slowdown is unlikely to induce the Chinese government to scale back maritime claims; it may provide an incentive for Beijing to seek an overseas distraction from domestic troubles.

China will have noted with satisfaction that the US in February 2016 announced a build-up of conventional forces in Eastern Europe, designed to deter Russian adventurism. It continues hoping that Washington's attention will remain divided between slow-burning tensions in Europe and Asia, and a fight against the so-called 'Islamic State'. Meanwhile, the Sino-Russian relationship will be crucial to the realization of China's OBOR scheme. And, even as it pushes westward over land, China is likely to enhance its naval presence around the Indian Ocean rim according to the One Road plan. Whether this will serve to protect its SLOCs or to widen the theater of naval competition with the US, potentially drawing in other regional powers such as India, remains to be seen. In any case, a drastic escalation of tensions is unlikely but shows of force – partly designed to mirror those conducted by the US – are more likely to occur than in the past.

CHAPTER 4

A Nuclear World Out of (Arms) Control

Oliver Thränert

The relevance of nuclear weapons in world affairs is increasing, not decreasing. All nuclear powers modernize their arsenals. This may result in destabilizing effects on nuclear deterrence constellations. At the same time, the discrepancy between the importance of arms control as a necessary supplement to nuclear deterrence on the one hand and its actual, limited role in international affairs on the other hand is constantly growing. In order to avoid future nuclear wars and to create strategic stability, a renaissance of arms control is urgently needed.

A man takes a selfie in front of a shell which is the replica of the biggest detonated Soviet nuclear bomb AN-602 (Tsar-Bomb), in Moscow, Russia, 31 August 2015. The shell is part of an exhibition organized by the state nuclear corporation Rosatom.

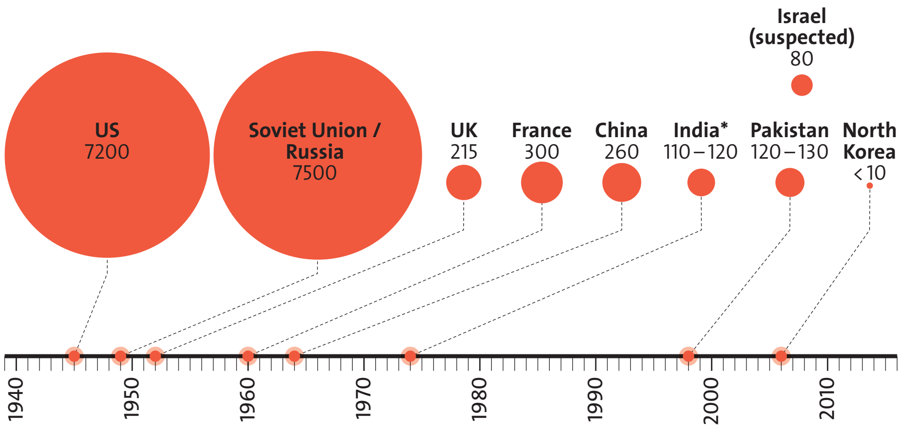
At this juncture, more than 16,000 nuclear weapons exist, owned by nine countries. Depending on their detonation yield and the circumstances of their use, every single one of these weapons could kill hundreds, if not thousands of people – not to mention the long-term effects such as radioactive contamination. In order to avoid such a disaster, and because nuclear deterrence does not generate stability by itself, a renaissance of the currently almost entirely neglected concept of nuclear arms control is urgently needed. However, other than during the Cold War, more nuclear powers than just the US and Russia have to engage.

There are many reasons to believe that the use of nuclear weapons is becoming more likely, not less. First of all, conflicts involving nuclear powers persist or are even escalating. Examples include the relationship between the West and Russia; the nuclear triangle of China, India, and Pakistan; and the Middle East. Secondly, the proliferation of certain capabilities that had been the exclusive preserve of the US (as well as France and the UK) and the Soviet Union or Russia will have quite a destabilizing effect on nuclear deterrence constellations for a long time. Among these capabilities are multiple warhead technology, sea-based nuclear deterrence components, and missile defense.

Already at the beginning of the nuclear age, arms control was developed with a view to mitigate nuclear risks and to avoid nuclear war. The point of departure of this new and innovative concept was the perception that in the atomic age, it is no longer sufficient to pursue national security unilaterally. Instead, in order to avoid mutual destruction, notwithstanding existing political conflicts, the security interests of other states must always be taken into account. The fathers of nuclear arms control, such as Thomas Schelling, argued that not only might political conflicts result in wars but the nuclear arms themselves might become a cause of war. Therefore, nuclear stability would include, among other things, secured nuclear second strike capabilities, as well as safe and secure command and control systems and crisis communication options. In a crisis, nuclear powers should not be pressured to use their nuclear weapons first.

Nuclear disarmament may be helpful, but cannot be seen as an end in itself. As is consensus among arms control experts, complete nuclear disarmament, as increasingly demanded by a growing number of states and non-governmental organizations, would only be acceptable if it served the overall purpose of strategic stability. As arms control proponents such

First nuclear tests and estimated total size of nuclear arsenal in 2015



* Test in 1974 declared a peaceful nuclear explosion; first official nuclear weapons test in 1998

Source: Federation of American Scientists

as Jerome B. Wiesner, member of the John F. Kennedy administration, argued, a comprehensive and reliable inspection system would be needed to make sure that clandestine nuclear rearmament will not occur. Alternatively, a 'world government' would have control over a remaining number of nuclear weapons to deter any illegal nuclear programs. As long as these requirements are not met, arms control concentrates on the less ambitious yet essential aim of avoiding nuclear war.

However, during the Cold War, nuclear arms control had only limited success. After the fortunate resolution of the Cuban Missile Crisis in 1962, crisis management and crisis communications systems were established. There is much to suggest that the Nuclear Nonproliferation Treaty (NPT), which entered into force in 1970, helped to keep the number of nuclear weapons states relatively small. Moreover, the nuclear dynamic was confined by imposing limitations on heavy intercontinental nuclear missiles and on the number of multiple independently targetable re-entry vehicles (MIRVs) carried by these weapons systems. This has improved stability during crises, because missiles with multiple warheads constitute rewarding targets for a nuclear first strike. The Anti-Ballistic Missile (ABM) Treaty of 1972 has helped prevent an arms race for defensive systems. Toward the end of the Cold War, the Intermediate-Range Nuclear

Forces (INF) Treaty even went so far as to ban the entire weapons category of intermediate-range nuclear missiles of the US and the Soviet Union. When the Soviet Union fell apart in 1991, arms control agreements were available to facilitate the handover of all nuclear weapons based on the territories of the former Soviet republics of Ukraine, Belarus, and Kazakhstan to Russia. Finally, joint verification of agreements helped to achieve a certain degree of transparency. The most important factor, however, may have been the continuous dialog about nuclear weapons, which promoted mutual trust and better insight into the other side's way of thinking on nuclear matters. Even though we cannot ultimately judge why nuclear war between East and West did not occur, there is much to suggest that arms control was at least partly responsible for this fortunate outcome.

Today, the culture of jointly managing the dangers of the nuclear age has become a thing of the past. Not only are Russians and Americans no longer negotiating on their nuclear weapons; they are accusing each other of having violated the INF Treaty. Apart from the INF Treaty, the 'New START' Treaty on limiting Russian and US strategic nuclear weapons, which came into force in 2011, is the only agreement to stipulate limitations concerning the respective nuclear arsenals. The treaty expires in 2021, although it can be extended once for five years. A new treaty could replace the New START agreement, but no negotiations are being held to that end, nor is it possible to anticipate whether, and if, US and Russian negotiators will meet again.

Nuclear weapons did not lose relevance for most of those countries that possess them. Only for Washington did nuclear weapons become less and less important. With the US far superior to all other contenders at the conventional level, Washington's policies have for many years sought to reduce the salience of nuclear weapons for its own deterrence strategy. Hence the US interest in nuclear arms control and nuclear reductions, as pointed out by President Barack Obama in his April 2009 Prague speech on a Global Zero for nuclear weapons.

For Russia, the salience of nuclear weapons is growing both politically and militarily. Moscow is therefore not interested in putting them on the negotiating table. But even if Washington and Moscow were to make a common arms control effort, this would hardly suffice. While both countries together still hold around 90 percent of the global nuclear arsenal, their conflict no longer dominates world affairs as it did during the Cold War.

However, nuclear powers with smaller nuclear arsenals, including France and Great Britain, still demand that Washington and Moscow take the lead when it comes to nuclear arms control. Moreover, other nuclear armed states have additional reasons for abstaining from nuclear arms control.

China is afraid of improved transparency that comes with nuclear arms control. In Beijing's view, this might threaten the survival of its relatively small nuclear force. India wishes to be recognized as a responsible nuclear actor, but will not agree to any nuclear restrictions as long as its nuclear neighbor China does not. Pakistan is not interested in arms control as long as New Delhi makes no efforts to do so. Israel regards its undeclared nuclear arsenal as a life insurance in a hostile environment. If at all, it would only negotiate on its nuclear weapons in the context of comprehensive talks about security in the Middle East. North Korea, for its part, would certainly love to be recognized as a nuclear actor in the context of arms control, but that is precisely what all the other nuclear powers are determined to deny Pyongyang.

While nuclear arms control is practically dead, there is an increasing danger of conflicts between nuclear armed states escalating past the nuclear threshold. In other words, the discrepancy between the importance of arms control as a necessary supplement to nuclear deterrence on the one hand and its actual limited role in international affairs on the other hand is constantly growing. This trend will be illustrated in the following sections using the examples of relations between the US/NATO and Russia; the nuclear situation in Asia; and nuclear developments in the Middle East.

The US and Russia: No longer nuclear friends

Even after the end of the Cold War, the US and Russia continued to develop nuclear planning and doctrine based on the concept of an assumed standoff situation. Launch-on-warning concepts were maintained. Both sides still base their nuclear doctrines on nuclear first use. Russia is apparently pursuing this course due to the conventional superiority of the West, but possibly also in order to be able to use nuclear weapons preemptively. Despite his Global Zero rhetoric concerning nuclear weapons, US President Barack Obama has not ruled out the first use of nuclear weapons. Apparently, the Obama administration, after talking to allies, arrived at the conclusion that a 'no first use' strategy would weaken the credibility of extended nuclear deterrence, in particular in the eyes of the US' Asian partners. In its absence, they might one day be encouraged to seek to safeguard their national security with a nuclear deterrent capability of their own.

At the same time, Russia and the US have been neglecting arms control. Effective from June 2002, then-US President George W. Bush even went so far as to abrogate the ABM Treaty. This move signaled that the US perceived new threats such as missile and WMD programs in countries like North Korea or Iran as taking precedence over arms control with Russia. Or, as former US Defense Secretary Donald Rumsfeld put it: "Arms control is not for friends".

Apparently, the US and Russia are no longer friends now. At least since Russia's annexation of Crimea and its military interference in eastern Ukraine, if not before, US relations with Russia may once more be described as confrontational. This has also made the issue of their nuclear weapons virulent again. On various occasions, Russia's President Vladimir Putin has noted that no country dares challenge Russia to a major conflict because it is one of the greatest nuclear powers on earth. Russia has stepped up nuclear exercises and repeatedly practiced the use of its nuclear weapons, including against major Western cities, as part of its military maneuvers. These maneuvers have created the impression that Moscow is increasingly integrating its conventional and nuclear warfare options. Moreover, President Putin has stated that he was willing to place Russia's nuclear forces on alert if the annexation of Crimea had met with strong resistance.

The US and Russia are in the process of comprehensive modernizations of their respective nuclear forces. Plans to this effect are fraught with political, technical, and financial uncertainty on both sides. Nevertheless, these modernizations could have a destabilizing effect at the strategic level. Russia is equipping its new generation of land-based strategic intercontinental missiles (ICBM) with multiple warheads, which will enhance their value as targets. Conversely, US nuclear weapons will be more accurate in the future while having lower detonation yields, aggravating the destabilizing effect even further.

What is most worrying, however, is the increasing importance that Moscow apparently attributes to tactical nuclear weapons on land, at sea, and in the air. Moscow possesses considerably more tactical nuclear weapons than NATO and wishes to keep it that way, thus balancing NATO's conventional superiority while also building a deterrent against China's growing conventional capabilities. Moreover, Western analysts fear that Moscow sees its tactical nuclear weapons as having more than just a deterrent role. In any case, high-ranking officials at the Russian Defense Ministry appear to have considered preventive nuclear strikes as an element of Russian nuclear doctrine. Despite Western concerns, however, these deliberations were not included in the Russian military doctrine published in December 2014, which is fairly moderate. It anticipates Russian use of nuclear weapons in two cases: if nuclear weapons or other weapons of mass destruction are used against Russia or its allies; or if conventional weapons are used against Russia to an extent that threatens the country's very existence. However, in Western circles there are doubts whether the unofficial part of the Russian military doctrine might not include preemptive nuclear strikes after all.

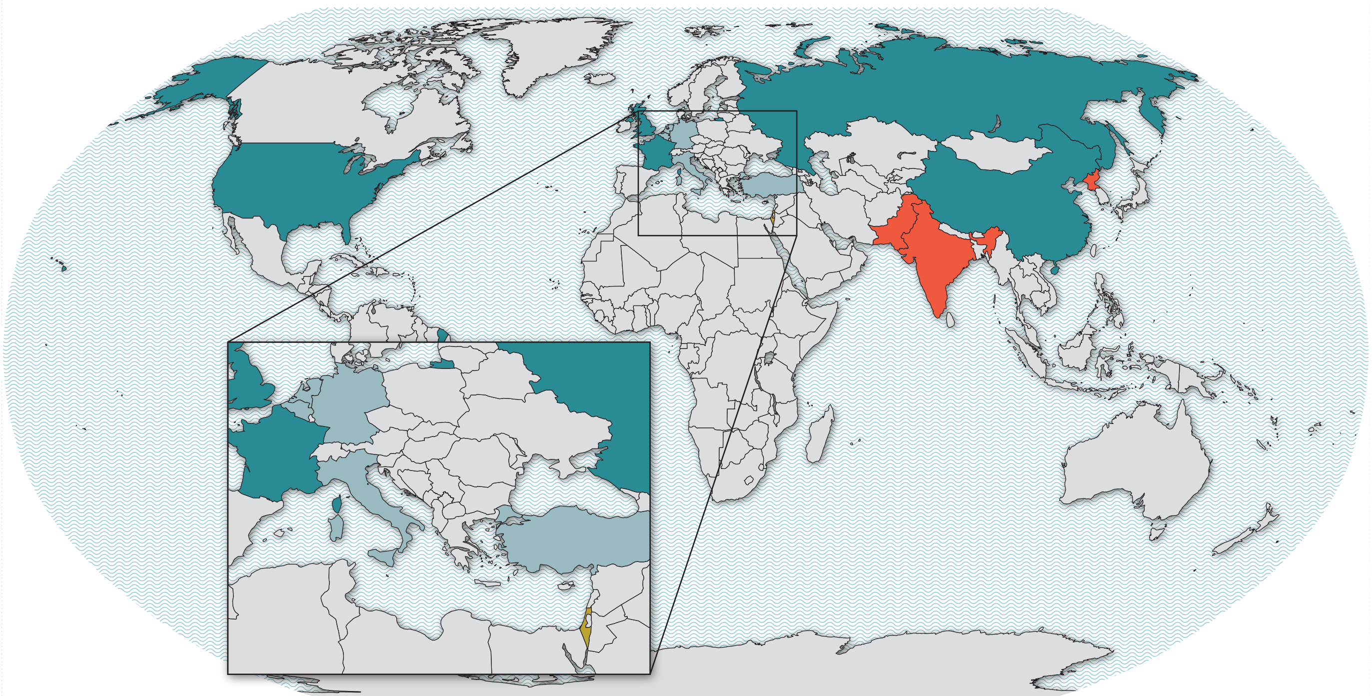
Indeed, observers in the West fear that Russian nuclear weapons could be used in the course of military interventions. They refer to internal Russian debates over "de-escalation through escalation". One scenario is of particular concern to Western military planners: The Russian military, possibly after a period of hybrid warfare, could occupy parts of Estonia or Latvia using conventional means on the pretext of protecting Russian-speaking minorities there. In such a case, NATO would have to mobilize conventional forces and deploy them in the east in order to prevent further Russian expansion and, in the best-case scenario, reverse potential Russian gains in the Baltic. In such a situation, however, Moscow might threaten the use of tactical nuclear arms to defend its newly annexed territory and thereby deter the deployment of NATO reinforcements. In other words: The threat of nuclear first use might become part of Russian anti-access/area denial strategies. Should this scenario indeed ever materialize, it would mean the end of NATO's *raison d'être*, as its members would have proven themselves incapable of countering an attack on the Alliance's territory.

This may seem as worst-case thinking, as Moscow would be risking escalation to the level of full-blown war with NATO. Some Western analysts speculate, however, that Russian plans are based on the assumption that NATO would be unwilling to resort to nuclear war with Russia over the defense of the Baltic.

The recent developments concerning the Russian nuclear arsenal have triggered an intense debate at NATO over the Alliance's own nuclear capabilities in Europe. The service life of the US B-61 nuclear bombs

Nuclear weapons in the world

As of 2015



Nuclear armed states under the NPT
Nuclear armed states outside of the NPT
States currently hosting US nuclear weapons
Suspected nuclear armed states

Source: International Law and Policy Institute stationed in Europe is already being extended. However, critics argue that these life extending programs would also improve the accuracy of the B-61, thereby making their use more likely. In any event, the number of US nuclear warheads stored in Europe will probably not be increased above the current number of about 180. They can be delivered by US warplanes stationed in Europe or by aircraft of the European alliance members Germany, the Netherlands, Belgium and Italy as part of NATO's nuclear sharing arrangement. Further, US nuclear weapons are stockpiled on a base in Turkey.

US nuclear forces stationed in Europe mainly served a political purpose after the end of the Cold War: to link the security of Europe to the US strategic nuclear forces and to strengthen the credibility of NATO's nuclear deterrence. From a purely military perspective, they appear ill-suited for actual use in a conflict with Russia. The aircraft designated for delivering these weapons require a fairly long mobilization period and would be vulnerable to Russia's air defense, increasingly even over NATO territory. Besides, NATO is numerically inferior to Russia when it comes to tactical nuclear weapons. In an actual emergency, therefore, the Alliance would be forced to escalate to the strategic level at a fairly early stage; such a threat is difficult to convey credibly though in view of the devastation that would certainly follow.

Accordingly, NATO has initiated a debate on adjusting its nuclear posture. That, however, requires unity among all alliance partners. Reassurance of NATO members, particularly new ones, and escalation control *vis-à-vis* Russia need to be balanced. The latter refers to the NATO-Russia Founding Act, in which the Alliance stated that it had no intention of stationing nuclear weapons on the territory of its new members and saw no need to change its nuclear doctrine. Should NATO renege on the principles of the Founding Act, Europe could face a new nuclear arms race that could result in dangerous instability. Therefore, NATO is well advised to concentrate on measures that do not include changes in its nuclear deployment modes, such as stronger language on the importance of nuclear deterrence for its overall military posture and increased nuclear sharing exercises.

The expansion of NATO's planned missile defense system also risks setting off instability. So far, the Alliance has argued that its missile defense program is not geared towards Russia but aims to ward off threats resulting from the proliferation of missile technology and weapons of mass destruction. Indeed, Russia's nuclear weapons arsenal is so large that effective defense is hardly feasible. However, NATO may in the future conceive missile defense capabilities for limited regional conflicts with Russia. The aim would be for the Alliance to counter any Russian threat of limited tactical nuclear weapons use, for instance in a conflict over the Baltic, with damage limitation options of its own. This, in turn, might be an incentive for Moscow to enlarge its own tactical nuclear weapons arsenal in an effort to overcome NATO's missile defense capabilities in the region.

Asia: A dangerous dynamic

In addition to the return of nuclear weapons on the US/NATO and Russia agenda, these weapons see a growing importance in Asia. The nuclear powers China, India and Pakistan as well as the 'special case' North Korea all modernize and expand their arsenals. The result might be a growing and dangerous instability.

China

China, as the most influential Asian power, has long practiced nuclear restraint. However, its nuclear policy now becomes more dynamic. While China continues to forgo nuclear first use (a stance that is disputed internally) and aims to secure a survivable nuclear second-strike capability, the country will continue to develop its nuclear weapons arsenal in terms of both quantity and quality, with potentially destabilizing consequences.

Against the background of its economic and political ascent, it makes sense for China to develop its military capabilities in general and its nuclear weapons in particular, which are seen in many parts as the international currency of power. Much more important, though, are China's threat perceptions. Specifically, Beijing is concerned that the US could undermine China's nuclear second-strike capability – on the one hand by extending missile defense capabilities, though these may currently be directed mainly against North Korea; on the other hand through the development of Conventional Prompt Global Strike (CPGS) capacities. Moreover, Beijing views the US-Indian rapprochement with concern, which may bring advantages for New Delhi not only in the civilian nuclear sphere but also with regard to its nuclear arms program.

According to various estimates, China currently possesses about 240 to 260 nuclear warheads. These are stored separately from their delivery systems; most likely, most of them are not assembled and ready for use. This underscores the hitherto extremely reactive nature of Chinese nuclear doctrine. China maintains roughly 60 ICBMs that can reach the US directly. Only a few of them are designed for use with multiple warheads. Beijing also has a growing number of shorter-range missiles that are largely equipped with conventional warheads. In a crisis situation, this mix of nuclear and conventional capabilities might lead to misjudgments on the part of the opponent and to unintentional escalation.

Currently, the arsenal of land-based missiles is being modernized: Older, mostly silo-based missiles using liquid propellant are being replaced with newer, road-mobile systems using solid propellant. These can be made combat-ready faster, and are more accurate. The switch from silo-based liquid-propellant missiles to road-mobile solid-propellant rockets is intended to strengthen the survivability of the Chinese nuclear forces. At the same time, these systems will be operational at all times without elaborate fuelling. Furthermore, long-range missiles currently under development are expected to be designed for use with multiple warheads. The increased emphasis on MIRV technology strengthens China's second-strike capability, since any attacker would risk incurring severe destruction even if only a few Chinese missiles were to survive a hostile first strike. However, missiles with multiple warheads constitute extremely valuable targets for the aggressor in a crisis since one of his own warheads can take out multiple enemy ones, which may result in crisis instability. Furthermore, China is in the process of testing a high-speed hypersonic glide vehicle. Such a system improves maneuverability and would be far less vulnerable to missile defenses than existing missiles. Again, Beijing seems to be conducting this program in an effort to secure its nuclear second-strike capability *vis-à-vis* the US. However, this contributes to a classical security dilemma: From the point of view of Washington as well as China's neighbor India, Chinese hypersonic glide vehicles could have a destabilizing effect as they are hard to detect.

China is also making considerable progress in building up a sea-based nuclear deterrent. At the end of 2015, China for the first time deployed a nuclear-powered submarine equipped with ballistic missiles on a nuclear deterrence patrol. The development of a submarine-based nuclear component also improves the survivability of Chinese nuclear weapons. However, that implies a departure from the previous policy of stockpiling missiles and non-assembled warheads separately. It is conceivable that as a result, decisions on the use of nuclear weapons will be pre-delegated to submarine commanders, especially since China will hardly wish to rely entirely on the reliability of communication links between command centers and submarines in times of crisis. Furthermore, Beijing is currently establishing a comprehensive early-warning system. While this also strengthens the survivability of its nuclear weapons, it only makes sense if China's own nuclear weapons can be launched immediately upon receiving an attack warning (launch on warning).

Taken together, China is on track towards acquiring a more robust nuclear second-strike capability in a changing environment. At the same time, however, the modernization efforts will lead to China distancing itself from its established practice of maintaining a highly reactive nuclear deterrent force. Some experts even believe that the importance of nuclear warfighting options is increasing for China's planners.

India

Similarly to China, India too is pursuing a policy of minimum nuclear deterrence and has renounced the first use of nuclear weapons, although it reserves the right to use nuclear weapons in response to an attack using biological or chemical weapons. Moreover, in case of conflict with its archrival Pakistan, the Indian military apparently plans to carry out conventional attacks against its neighbor's nuclear weapons arsenal at an early stage of conflict. Currently, India possesses about 100 nuclear warheads. Most of these are presumably stored in a non-assembled state. Nuclear warfighting strategies are not part of India's strategic repertoire, but regarding India's growing importance in the world, the country's political elites have committed themselves to building up a complete triad of land-based, sea-based, and air-based nuclear weapons. An important factor is the maintenance of status *vis-à-vis* neighboring China. Also, India is pushing for further development of its nuclear weapons in order to enhance its deterrent capability, which currently rests mainly on nuclear-capable aircraft, in view of the numerically and qualitatively superior forces of China. In doing so, however, New Delhi increasingly finds itself trapped in a conflict of aims: A capability that is credible with a view to China is not minimal with regard to Pakistan, and a minimal deterrent against Pakistan is not credible towards China. Moreover, should India be subjected to renewed provocations such as terrorist attacks supported, or at least endorsed, by Pakistan, it reserves the right to deliver conventional strikes against its neighbor, which could cause Pakistan to escalate to the nuclear level, particularly if forward based Pakistani nuclear weapons were in danger of being captured by invading Indian forces. In such a case, under India's nuclear doctrine, which does not currently involve flexible nuclear options, the country would either have to deliver a massive nuclear response or do nothing – an approach that would clearly lack credibility.

India is working intensely on the development of new land-based missiles including the Agni V, which could hit targets anywhere in China. It is also working on building a submarine-based nuclear component. MIRV technology is part of India's efforts, but will most likely require some time to acquire. China's ongoing development of missile defense programs, which are most likely intended for use against India (however, this has yet to be decided by China), would add further fuel to India's efforts at expanding its nuclear capabilities. This, in turn, would motivate Pakistan to increase its nuclear arsenal.

Pakistan

Although Pakistan at least in rhetoric follows a minimum nuclear deterrence posture, its nuclear arsenal (currently standing at about 100 warheads, most of which are probably not in a state of immediate readiness for use) is currently the fastest-growing among all nuclear armed states. It is estimated that Islamabad can produce about 20 nuclear warheads a year. It also reserves the right to first use of nuclear weapons, for instance in the case of an Indian conventional attack. The country's growing nuclearization is a problem in light of Pakistan's questionable internal stability. Currently, the Pakistani military appears to be in full control of its nuclear weapons. It is impossible to predict, though, what would happen to this arsenal if the country were to disintegrate.

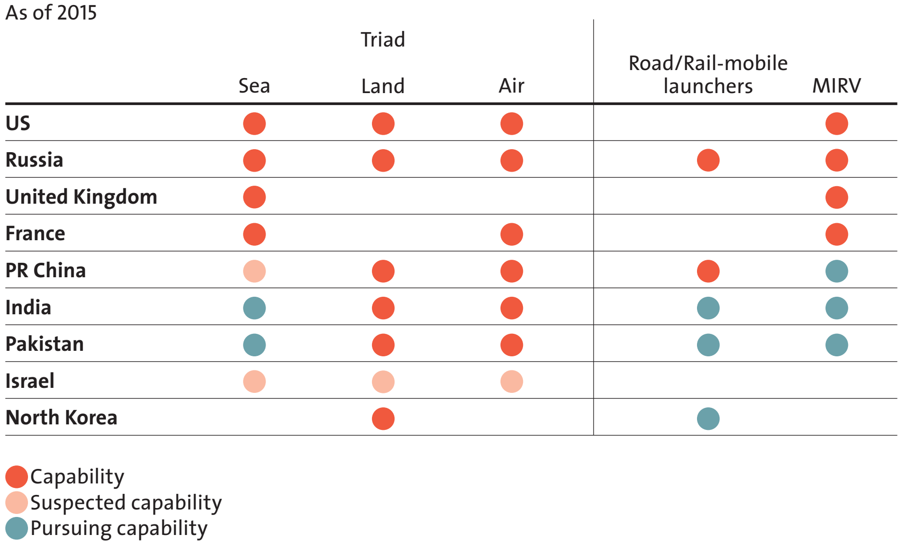
Pakistan finds itself in a race with its archrival India for the modernization of nuclear delivery systems. This could destabilize relations between the two countries. Indian missile defense systems that are currently under development could also contribute to a destabilization of India-Pakistan relations. A matter of particular concern in terms of stability is Pakistan's increasing attention to matters of nuclear warfighting and the heightened importance it attributes to tactical nuclear weapons as a way of offsetting India's growing superiority in conventional arms. In a crisis, this might lead to local commanders receiving pre-delegation authority, which may in turn result in crisis instability.

North Korea

North Korea is another uncertainty factor in the nuclear picture. Presumably, the country is able to assemble

Selected nuclear capabilities

As of 2015



Sources: Bulletin of the Atomic Scientists; Federation of American Scientists; Science, Technology & Security Forum; CNN; BBC

simple nuclear devices. Experts are uncertain whether it is also capable of placing these on ballistic missiles. In any event, as was underscored by North Korea's recent nuclear test of January 2016, irrespective of whether the device qualified as a hydrogen bomb or not, the country pursues to enhance its nuclear capabilities. Pyongyang apparently has sufficient weapons-grade plutonium for six to eight nuclear weapons. In addition, it seems that North Korea has resumed its plutonium production and is also able to enrich uranium for weapons purposes. The operational readiness of its long-range missiles is unclear; however, its Nodong missiles, which are probably operational and have a range of over 1,000 kilometers, are sufficient to frighten North Korea's neighbors such as South Korea and Japan. Due to Pyongyang's recurrent policy of brinkmanship, calls for nuclear weapons of their own for deterrence are increasingly heard in those countries. From a purely technical point of view, both Japan and South Korea would be able to acquire such weapons within a relatively short timeframe, thanks to their highly advanced civilian nuclear infrastructure.

Complicated Entanglements

In addition to the nuclear 'wild card' North Korea, the overall nuclear dynamic in Asia has considerable explosive potential of its own. China and India appear to be discarding their long-standing nuclear self-restraint. China is doing so chiefly in response to US policies concerning missile defenses and CPGS. Beijing is also concerned over the rapprochement between India and the US. India for its part has yet to create a credible nuclear deterrent *vis-à-vis* China. Its efforts in this area are forcing Pakistan's hand. Supported by China, Pakistan has embarked on a massive nuclear arms buildup, not least because of India's growing conventional superiority. This situation is aggravated by the regional proliferation of precision weapons that, even if only equipped with conventional warheads, could facilitate the destruction of hostile command-and-control centers, potentially creating pressure to engage in preemptive nuclear strikes.

Naturally, the danger of nuclear conflicts depends on political relations among the countries involved. In view of the territorial conflicts that are coming to a head in the South China Sea between China on the one hand and US allies such as Japan on the other, the US-Chinese relationship increasingly seems to be on a course towards confrontation, although Beijing and Washington remain mutually dependent in the economic sphere. China and India are still nursing tenacious border conflicts, while Indian-Pakistani relations remain shaped by the unresolved Kashmir conflict as much as by the specter of terrorist attacks in India, supported or endorsed by Pakistan, potentially setting off a far-reaching crisis between the two neighboring states. Nuclear arms dynamics that may lead to nuclear warfare doctrines may result in dangerous crisis instability.

The Middle East: Respite after the Iran deal

For many years, observers have been concerned about an Iranian nuclear program. Some feared a nuclear arms race involving Saudi Arabia, Turkey, or Egypt. Others wondered whether permanent and stable mutual nuclear deterrence between Israel and a nuclear armed Iran might be achievable. The Joint Comprehensive Plan of Action (JCPOA) of July 2015 has now secured a respite but did not necessarily resolve the Iranian nuclear issue.

Iran

Under the agreement, the Iranian nuclear program will be submitted to certain restrictions for a limited period of time. Assuming that the deal is implemented as planned, there would be only a marginal likelihood of Iran building a nuclear weapon in the coming ten to fifteen years.

However, the JCPOA leaves the entire Iranian nuclear infrastructure fundamentally intact. Research and development remain permitted. The specific restrictions will be lifted according to timetables specified in the JCPOA. Iran's missile program is not affected by the deal. In other words, Iran remains a nuclear threshold country that is in principle able to create fissile material for weapons purposes, which possesses delivery systems for the use of nuclear weapons, and presumably the know-how for building nuclear weapons.

Against this background, it should come as no surprise that Iran's neighbors and enemies remain concerned. Thus, agreement on the JCPOA does not preclude the rise of new nuclear powers in the region. The first candidate in this regard is Saudi Arabia. Its geopolitical conflict with Iran, based on ethnic antagonism between Persians and Arabs as well as the religious conflict between Shi'ites and Sunnis, is likely to intensify. As a result, both sides are supporting antagonistic parties in conflicts such as those in Iraq, Syria, and Yemen.

Saudi Arabia

Riyadh is frustrated because the JCPOA essentially acknowledges Iran's status as a nuclear threshold country. This flies in the face of the Saudis' own claim to be able to match all of Iran's capabilities. Accordingly, they have refused to waive their fundamental right to enrich uranium, keeping the option for the future production of fissile material for weapons purposes open in principle. Riyadh will most likely find it difficult, however, to acquire this technology, as its export is banned under the rules of the Nuclear Suppliers Group (NSG). Thus, Saudi Arabia would have to look to potential supplier countries outside of the NSG, such as Pakistan and North Korea.

Saudi Arabia's nuclear infrastructure is obsolete. There are plans to build up light-water reactors for electricity generation. Saudi Arabia signed nuclear cooperation contracts with a number of states, including Russia and China. In addition, Saudi nuclear experts have been trained in Western universities. However, the King Abdullah Atomic Energy Center currently does not even have a research reactor that could be used to train staff.

The often-discussed scenario of Saudi Arabia acquiring nuclear weapons from Pakistan, or allowing Islamabad to station nuclear weapons under Pakistani control on Saudi territory, is rather unlikely. With such a move, Pakistan would risk making an enemy of its neighbor Iran, a nuclear threshold state. Against the background of its conflict with its militarily superior enemy India, Pakistan's leadership will probably wish to avoid the resulting two-front conflict. Moreover, such a step would warp relations with the US even more, which would ultimately only help India. At the same time, it would be the end of Pakistan's claims to be seen as a responsible nuclear actor.

Turkey

Turkey, too, is believed to keep the nuclear option open. Indeed, compared to Saudi Arabia, for example, Turkey has a considerably advanced nuclear infrastructure. Ankara, too, is planning to build light-water reactors for electricity generation, and refuses to forgo uranium enrichment as a matter of principle. Initial steps towards mastering this technology have already been undertaken. However, at least for the time being, this picture has yet to coalesce into anything that could be described as the rudiments of a Turkish nuclear weapons program. In fact, such an undertaking would certainly create considerable problems for the NATO member Turkey – with the Alliance in general and the US in particular.

Egypt

Finally, Egypt has traditionally asserted a leadership role in the Arab world. Cairo would hardly stand by and watch other countries in the Middle East become nuclear weapons states, all the more so since the country already pursued a nuclear weapons program in the era of Gamal Abdel Nasser. In spite of Egypt's plans for a civilian nuclear program and the associated development of the country's nuclear infrastructure, it is unlikely to develop a nuclear weapons project in the foreseeable future, not least in view of its significant economic problems.

Vigilance, not alarmism

Against this background, alarmism about a potential nuclear arms race in the Middle East seems unwarranted. Nevertheless, such a development cannot be ruled out entirely. The way in which the nuclear deal with Iran is implemented in the coming years will doubtlessly have a strong impact on future developments. Since Iran will remain a nuclear threshold state even if the agreement is implemented as planned, it is reasonable to assume that other states will strive to attain a similar status for themselves. For the time being, however, it seems that some breathing room has been gained.

If the situation should escalate once more, raising the likelihood of a nuclear armament dynamic in the region, this would add another highly dangerous dimension to the numerous conflicts already existing. This would also be dangerous for Israel, irrespective of its presumed nuclear second-strike capability. Since one or two nuclear detonations on Israeli territory would be sufficient to devastate the country, its political leaders would be under high pressure to take preventive measures. It would be very tempting in a crisis situation to attack any opponent's nuclear forces, such as Iran's, at an early stage. Again, the result would be crisis instability.

Arms control as a necessary supplement to nuclear deterrence

The relevance of nuclear weapons in world affairs is increasing, not decreasing. All nuclear weapons states continue to modernize their respective arsenals. Nuclear deterrence clearly is back in US/NATO-Russian relations. In Asia, a nuclear dynamic that includes China, Pakistan and India, but which is also related to certain weapons developments in the US, may result in dangerous instability. In addition, the nuclear wild card North Korea is an ongoing cause of concern. While the JCPOA gives pause to those who believe that an Iranian nuclear weapons capability is inevitable, the issue is far from ultimately solved. There is still some probability of a nuclear arms race in the Middle East, especially if it turns out in the coming years that Iran does not implement the JCPOA as planned.

At the same time, this renaissance of nuclear weapons is not matched by a comeback of nuclear arms control. To the contrary: Arms control as originally established at the dawn of the nuclear age seems politically dead. Other than during the Cold War, a continuous negotiation process that provides nuclear powers with an opportunity to better understand their opponents' thinking on things nuclear is lacking. Nuclear deterrence is not in and of itself conducive to stability, it also requires the instrument of arms control as a supplement. Unless nuclear powers take into consideration the security interests of their nuclear opponents with the aim of commonly creating strategic stability, the world of nuclear weapons is in danger of spiraling out of control.

CHAPTER 5

An Energy World Order in Flux

Severin Fischer

Volatile commodity prices, new technologies, changing market patterns and a growing flexibility in energy relations: The energy world has experienced a fundamental transition over the last decade. Many traditional views and conventional wisdom about the role of energy in foreign and security policies can today be put into question. The political influence of suppliers is set to be diluted. Hand in hand with this goes a temporary shift of power in favor of energy consumers. Instability in producer states will become the main energy-related security feature.

Unclear destiny: Growing flexibility in trade is changing market patterns; LNG tanker in Sakhalin, Russia.

While conflicts in Northern Africa and the Middle East, the growing number of refugees and the war in Ukraine dominated media headlines in 2015, energy recently seemed to be a rather stabilizing factor in the security debate. In the present situation of shrinking commodity prices, traditional energy-related security questions – how to deal with the scarcity of resources or how to handle the political influence of oil and gas producing states – have lost significance. This, however, might turn out to be misguided. The ongoing changes in the energy world deserve close analysis from the security policy angle since they tend to create new imbalances and challenges in the future. Russia's growing hostility towards its neighborhood, the ongoing conflict between Saudi Arabia and Iran, civil war in Libya – none of these developments could be explained without the energy factor.

For several security-related reasons, recent developments in the energy world deserve close attention. First and foremost because oil and gas prices influence the stability of regimes in resource-rich and crisis-torn regions. Energy plays a significant role for regional security in this context. Second, market developments have an impact on the energy world order, understood as the formal or informal set of rules that structure the relationships between suppliers and consumers; individually and as groups of states. Third, developments in the energy world matter because conventional wisdoms about the future of energy supply need to be put under scrutiny, be it peak oil theories, the controversy between the Organization of Petroleum Exporting Countries (OPEC) and the West, or the long-term nature of mutual gas supply dependencies.

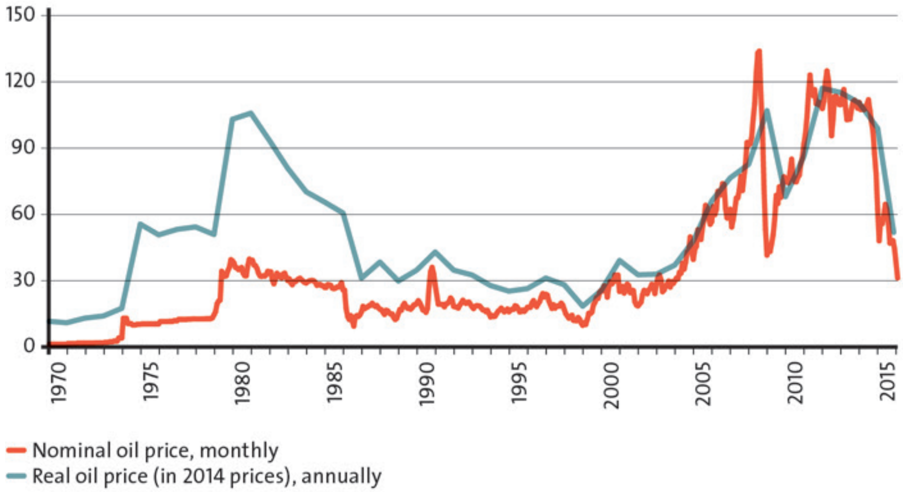
The first part of this chapter focuses on the underlying market fundamentals as well as political reactions to low oil prices such as OPEC's part in stabilizing markets. The crucial role of Saudi Arabia deserves special attention here. A second part assesses the role of gas markets. Here, the changing nature of long-term gas relations between states, the rise of liquefied natural gas (LNG) trade and the globalization of gas markets will be analyzed. The need to reconsider the relationship between Russia and the EU is a relevant topic in this context. The final part of this chapter concentrates on the foreign and security policy implications of these changes in energy markets and supplier-consumer relations, pointing to four crucial security challenges for the coming years.

A world of cheap oil

In January 2016, spot market prices for a barrel of Brent oil hit a record

Evolution of the oil price

In USD per barrel; 1970–1983 Arabian Light, 1984–2015 Brent



Sources: EIA, BP Statistical Review, World Bank

low of less than USD 30, as low as it had last been thirteen years ago. This development looks even more impressive when considering inflation-adjusted real prices, which hint at a comparable level as decades ago. Far more important than touching these symbolic thresholds, however, is the speed of the recent oil price decline itself. The price fall started only in mid-2014 at around USD 115 per barrel and had not stopped until recently. Today, nearly all relevant market indicators suggest that this massive devaluation of crude oil is set to last for at least another year or two, with only slight recovery afterwards. Even a comeback to levels of USD 60 or 70 per barrel would still mean a fundamental deviation from most long-term market outlooks.

Before assessing the effects of these price developments, it is necessary to analyze what is driving this unexpected turnaround in the oil markets. What happened to the strategic outlooks suggesting scarcity rather than an oil glut? There is not one single cause to explain the phenomenon. It rather has the character of a set of self-enforcing developments, leading to a snow-ball effect. The most relevant factors are to be found on the supply side of the oil market. The massive increase of production in the

United States over the course of the last five years has added significantly to an increase in global oil production by 10 percent. Most of this additional production capacity is in the hands of comparatively small and medium-sized US companies, using fracking technologies to access shale reserves – a veritable army of flexible producers with short investment cycles. In addition, new large-scale exploration on a global scale (e.g. Brazilian offshore drilling) and additional production by established oil producing countries (e.g. Russia) as a response to falling prices have completed the picture. The recovery of war-torn states like Iraq adds to the positive outlook. While Syria's production capacity is of minor relevance, other critical suppliers like Nigeria increased their production levels again. Finally, the expected comeback of Iranian oil exports after the lifting of sanctions completes a bloomy picture on the supply side.

The second set of factors that has driven oil prices down can be found in the low-growth expectations of consumers. Mainly China's appetite for oil seems to be significantly smaller than expected. Although overall global oil consumption keeps rising and reached a maximum of over 95 million barrels a day in the second half of 2015, the rates of growth are set to decrease. After a period of comparatively high oil prices during the economic recession, companies and states started to consider lower consumption and alternative fuels as an economically sensible option – with significant impact on the demand side.

Both developments merge into a picture of global oil oversupply at an average of around 1.5 to 2 million barrels per day. This situation has been a market structuring feature since mid-2015. A good indicator for a continuation of a phase of low prices is the massive increase in oil stocks around the world, which reached an all-time high of 3 billion barrels in December 2015. This also underlines the assumption that the present oil price developments are reflecting real supply-demand imbalances rather than a speculative bubble. Even the oil producers' World Oil Outlook expects an optimistic rise to only USD 80 per barrel by 2020.

Obviously, any discussion about the future oil price is unreliable, even more so when looking into the distant future. It is remarkable, however, that even the recent political crisis between Saudi Arabia and Iran has left oil prices largely unimpressed. Most indicators today point in the direction of a low-price scenario until the mid-2020s. A military conflict in one of the big producer states may be the only realistic scenario to cause a new price hike in the near future. For political analysts, the most interesting question behind this new low oil price scenario is the relative gain and loss of power as well as its effect on the energy world order. This also requires a distinction between economic and political factors.

Economically, the energy-intensive and fuel-importing economies in Asia and Europe benefit most from the low-price environment, at least in the short term. After years of crisis in Europe and in times of lower growth rates in China, the improvement of trade balances is a stabilizing economic factor. It also helps state budgets through lower fuel subsidies, which has great relevance in emerging economies such as India. This, however, is not a zero-sum game, since low oil prices could also initiate a global recession with unknown consequences. So far, Europe and the emerging economies in Asia, as well as the United States, are among the winners of the low-price era. In the US, a growing oil and gas industry has increased tax revenues and created jobs. Reduced imports and the political decision to allow exports of oil and gas have also improved the trade balance sheet. Despite these positive developments, it is not clear for how long the US shale oil industry can sustain the pressure of low oil prices. They could soon fall victim to price competition, partially caused by their own massive increase of production in recent years. While the US oil drillers survived 2015 price levels with improvements in efficiency, 2016 will most likely see a market consolidation. Although the survival skills of the US shale industry might be exhausted soon, the new political self-perception of the US as a largely independent energy superpower prevails, and has implications for US foreign and security policy. Military interventions in regional conflicts to guarantee access to energy sources have lost significance in the national discourse.

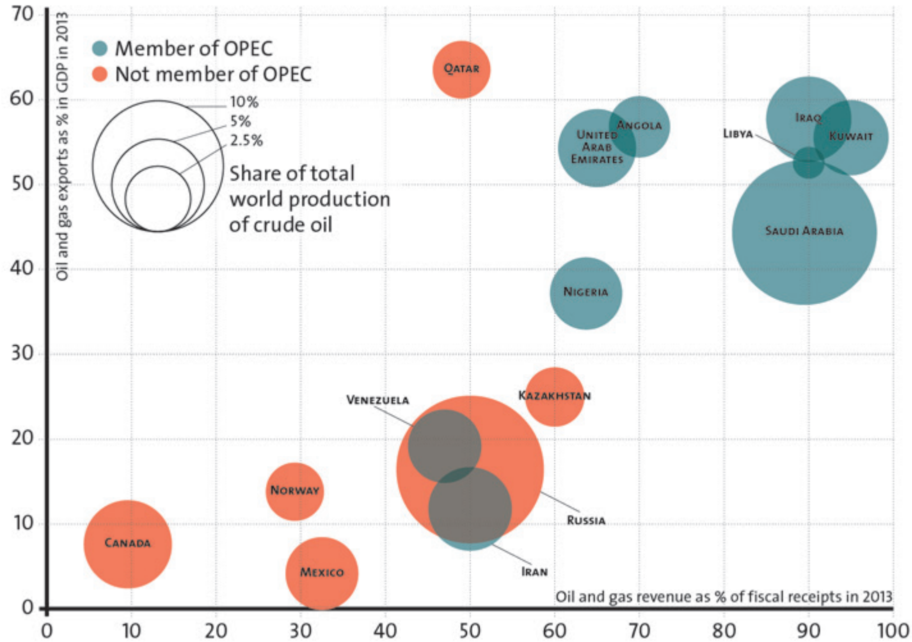
Current oil price developments also create economic losers. Many international oil companies (IOCs) with high-price production assets, such as those in the Arctic or in the deep sea, are facing economic difficulties, and need to cut back on new projects. In total, IOCs have cancelled at least USD 200 billion worth of investments in 2015 alone. This could mean that the influence of Western IOCs on the oil production of the future is shrinking. Their reluctance to invest also affects potential future suppliers with relatively high production costs negatively; Brazil being a prime example.

In the short term, however, states with high shares of oil exports in their GDP are moving into difficult waters; such as countries in the Persian Gulf, and/or producers with high domestic budgetary spending in the form of subsidies, such as Venezuela. Monetary policy also plays a role: Economies with free-floating currencies can temporarily cope better with the present situation than those closely pegged to the US dollar, although this offers only short-term relief. The currency devaluation in Russia presents one of the examples where wages and public debt can be paid with a cheaper ruble. Effects on the state budget look less harmful if currency inflation is used. For this reason did Kazakhstan and Azerbaijan recently free their currency from the dollar-peg. However, the consequence is growing costs for imports and increased the likelihood of social unrest. Finally, countries with a sovereign wealth fund from oil revenues and large foreign currency reserves can sustain themselves longer in the present situation than those who need to borrow money abroad or from their citizens. In that respect, Norway, Qatar or Saudi Arabia have a longer breath than most others. The Saudi monarchy was able to cover its USD 90 billion budget deficit in 2015 through its state fund. However, like currency devaluation, this can only be a temporary measure. Exemplary for this is Saudi Arabia's announcement to cut subsidies, to introduce taxes and to sell shares of its large national oil company Saudi Aramco.

Beyond the pure economic balance sheets, naturally, there is also a political dimension to the oil market developments. In the past, the 'oil weapon' – the use of production quotas as an instrument of political coercion – was a common narrative to describe energy security challenges caused by OPEC. The political role of OPEC as a producer cartel and its ability to act as such have changed over the past decade. Two developments are important in this context. First, OPEC's share of global production has declined significantly. While a number of new producers has entered the market lately, the rise of US oil production had the biggest impact. Today, OPEC controls only roughly a third of global production, down from around half in the 1970s. There had been lower levels in the time between, yet those were mainly caused by artificial restrictions of production and not by capacity limitations. Today, market shares are more spread out, mostly due to recent production growth in the US and Russia. Although OPEC still controls most of the known geological reserves, this asset has only limited influence on today's prices. Second, OPEC's internal cohesion is eroding more and more. The gap between the 'haves', countries with high

Sensitivity to the oil price plunge

The 15 largest exporters of crude oil in comparison



Sources: UNCTAD, IMF, EIA, CIA World Factsheet, Financial Times, Stratfor, KPMG, Statistics Norway, Canadian Government

rates and low costs of production such as Saudi Arabia, and the 'have-nots', countries with low production rates and/or high production prices (basically everyone outside the Gulf region) is widening. Hence, OPEC's ability to develop common positions is diminishing. Calls from inside and outside OPEC to cut production in order to stabilize prices at a level above USD 50 per barrel are in fact calls for Saudi Arabia to do so, being the only potential and relevant 'swing producer' left in the group. All other members either cannot afford such a measure or are too small to have an impact.

If OPEC's destiny is in the hands of Saudi Arabia, why is the oil monarchy not acting on the present situation by lowering output to increase prices for all producers' sake? Four reasons might explain Saudi Arabia's reluctance to reduce production: First, Saudi Arabia sees itself as one player in a 'game of chicken', in which those who make the first move are set to lose. The individual motivation to cut supplies while other suppliers inside or outside of OPEC do not do the same, and benefit from this move, seems low. Past experience supports the validity of this assumption, since OPEC's system of production control has proved inadequate. In this sense, the gains for Saudi Arabia would hardly outweigh the costs in the short run and set a misguiding signal for future measures. As the recent move towards an agreement for a production freeze with Russia shows: There is little interest in reducing production while others keep increasing their production levels.

Second, from Saudi Arabia's point of view, the biggest new competitor in the oil market, the US shale oil industry, can only be successfully defeated by making their production unprofitable. According to many analysts, it would require another year or two until a significant number of US companies goes bankrupt. Already in 2015, the number of newly developed oil rigs in the US was in decline. However, the effect could only be a temporary one, with market consolidation and higher efficiency in drilling as a result. The flexibility and adaptability of US oil businesses is still not known. Companies could be back in the market within a relatively short period of time when prices reach a medium level again. Therefore, it looks plausible to suggest that the US shale industry has taken over the role of a market-driven swing producer, substituting for Saudi Arabia in its role as a politics-driven swing producer of the past.

Third, broader geopolitical arguments can explain Saudi Arabia's inaction. The conflict between Saudi Arabia and Iran could find a translation into the energy world. With the end of sanctions, Iran's hopes to enter global oil markets and to find investors again are in real danger in view of today's low oil price environment. Stopping Iran from gaining additional revenues and modernizing its ageing infrastructure could be a relevant factor in the whole range of explanations for the Saudi strategy. It also explains why Saudi Arabia will not agree on production cut without Iran committing to a similar move.

Finally, one could also argue that Saudi Arabia's hesitation to act on the issue is due to fears concerning the potential ineffectiveness of the measure itself. The country's main power asset of the past decades has been its control of oil supplies by opening or closing taps. Due to many different developments, mainly the emergence of new actors in oil production, this role has diminished. In a scenario in which Saudi Arabia cuts production significantly but other producers step in and prices do not change at all, the new reality of a less powerful Saudi Arabia would become obvious. Instead of testing the limits of its power, the monarchy rather rests on the traditional view that it is an oil power, without defining its range of influence in present day markets.

Recent developments in global oil markets and the looming period of cheap oil are changing basic assumptions about global energy relations and the influence of oil on politics. In a nutshell, we can see the economically more powerful and politically more independent United States starting to export crude oil and hoping for a continuation of the present situation. European and most Asian economies take a deep breath due to otherwise less optimistic economic outlooks. Crucial changes, however, can be seen with respect to the economic and political situation of oil exporting countries, mainly Saudi Arabia and Russia, which deserves a closer look in the last part of this chapter.

New routes, more flexibility: Natural gas goes global

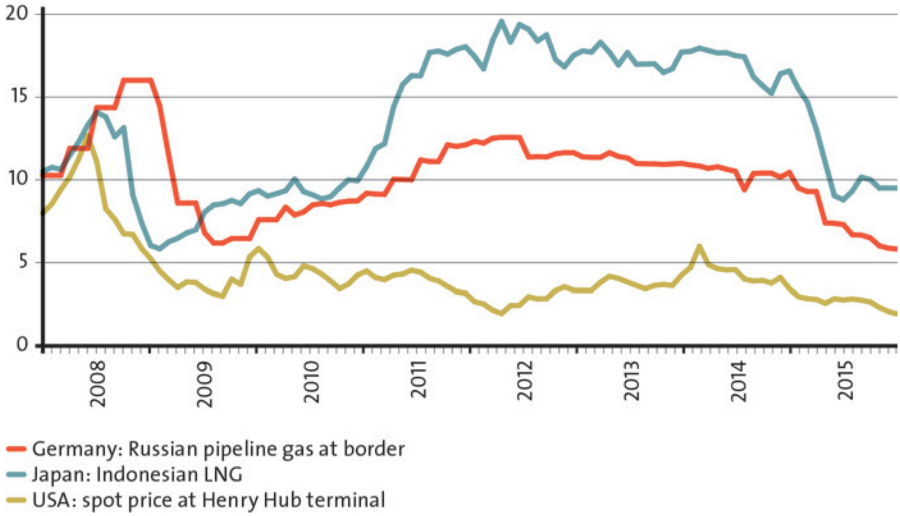
While individual and group actors' economic influence in global oil market developments have been a common energy security study feature over the last decades, natural gas has traditionally been viewed as a merely regional, less economic yet highly political issue. So far, long-term contracts, large-scale pipeline projects, and relations based on mutual dependency were the currency of gas politics. This has changed in the last couple of years. Marketization, technological development and new ways of transportation have had a severe impact on the economics behind the politics of natural gas. Under these new circumstances, the security debate around natural gas also requires an adjustment.

The growing use of natural gas is a phenomenon of the second half of the 20th century. Compared to oil and coal, high costs for transportation and storage had hindered the full entry into the energy system before. Natural gas started to gain ground only with the oil crises of the 1970s and 1980s, the development of North Sea oil and gas drilling as well as growing environmental concerns. Due to its low carbon intensity, natural gas is likely to become an even more important fuel on a global scale in the next decades.

Contrary to oil, natural gas markets have been organized on regional grounds, mainly due to high interregional transportation costs. Three markets emerged: a Northern American one, large and mainly self-sufficient with production in the US and Canada; a European market of similar

Evolution of natural gas prices

In USD per Million Metric British Thermal Unit (mmbtu)



Source: IMF

size, supplied by slowly decreasing domestic production in the EU and growing imports from Norway, Russia and Algeria; and finally, a late-coming and small but fast-growing Asian-Pacific market, with Japan and South Korea as the biggest consumers of natural gas delivered by ship. Trade in these markets was organized through long-term contracts between producers and consumers based on oil-indexed formulas, since natural gas had traditionally been a waste product of oil drilling.

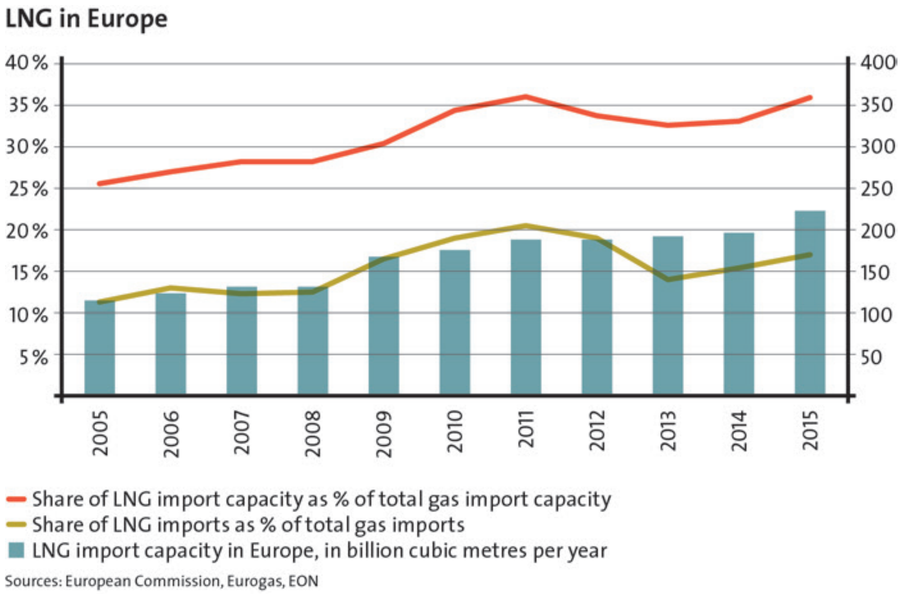
In the past decade, the landscape of natural gas markets has significantly changed, mainly due to three interlinked developments. First, with the rise of liquefied natural gas (LNG), the mode of gas transportation by pipeline has experienced competition, causing more flexibility in trade. For many years, gas relations were based on high-cost infrastructure projects that were financed by oil-indexed long-term contracts. While Japan and other Asian countries had been relying on LNG for quite some time already, companies in the US began to develop plans and to invest in LNG import facilities in the 1990s. In Europe, LNG trade was a latecomer and only chosen by a handful of countries as a possible supply option. Companies and policy-makers in Spain and France, later in the UK and Italy, decided individually to invest in LNG import facilities. Especially for Southern European countries, this was seen as an option to get access to North African suppliers. Due to efficiency gains in the cost structure, LNG reached a level of more than 20 percent of EU imports in 2011. Today, LNG terminals cover one third of the EU's total gas import infrastructure.

Second, the organization of markets and the mechanisms of pricing natural gas have changed over the course of the last decades. Originating in the US, the creation of gas trading hubs and a de-linking from oil prices influenced the way natural gas is traded as a commodity. In the US, the Henry hub has emerged as the reference price for gas trading. In Europe, this process was much more fragmented. Great Britain and the Netherlands started trading on hubs already in the 1990s, when the rest of Europe was still living in a world of more or less opaque long-term contracts with strong oil-price linkages. For many years, it used to be common sense for European consumers that rising oil prices were followed by rising gas prices with a short time lag. The success of trading hubs and the push by the European Commission towards liberalization have changed these market fundamentals of natural gas trade in Europe. Although with regional differences, the share of flexible hub trading has been rising constantly. Even Russia's Gazprom started first spot market trade. High oil prices and an oversupply of gas in the European market in the years 2011 – 13 emerged as a disadvantage to those companies linked to suppliers with oil-indexed long-term contracts.

As a third development in natural gas markets, the growth in LNG trade and the liberalization of natural gas markets coincided with a technological innovation that has overrun gas markets in the past years, namely the emergence of hydraulic fracturing and horizontal drilling – or to use a more common phrase: the shale gas revolution. It took off around 2007/08 in the United States. Within a very short period of time, outlooks concerning the future development of global gas markets had to be revised fundamentally. Shale companies in the US created an oversupply in the market, imports were stopped and a natural gas glut emerged on a global scale. US LNG import facilities were transformed into liquefaction terminals for exporting gas. In the follow-up, the increasing amount of US shale gas brought a new price dynamic into a liberalized US gas market that showed clear deviations from oil price developments. Natural gas prices dropped to an all-time low, creating a significant price gap between the US and Europe as well as Asian markets.

Looking at the price developments in the different regional markets, the effects of the three innovations can be recognized. For many years, a correlation of price developments – although on different levels – in American, European and Asian-Pacific regions was a basic market condition, but around 2009 a downward trend in US prices became obvious. At the same time, European and Asian prices moved upward due to the prevailing oil price linkages. Demand in the Asian-Pacific market received an additional push upwards when the Fukushima accident in Japan led to a closure of nuclear power plants and natural gas became even more attractive, incentivizing new gas producers in Australia and Africa to enter this high-price market even faster. In the European market, however, a reduction of demand due to the economic crisis and an increase of the use of coal and renewable energies in the electricity sector led to a significant drop of the share of natural gas in the market. At the same time, flexible spot-market trading at hubs increased, mainly due to the competitive advantage compared to long-term oil-indexed contracts with Russian or Algerian suppliers. Lately, low demand and low spot market prices turned out to be a problem for the LNG business as well.

Some parameters have changed fundamentally in the European gas market over the last couple of years. Most importantly, Gazprom's business model is under pressure. The increase of LNG imports and the emergence of spot market trading run contrary to Russia's interest in long-term and oil-indexed pipeline contracts with selected European partners. The pure existence of alternative supplies and new pricing mechanisms has recently led to renegotiations of gas contracts. An exemplary case is the opening of an LNG terminal close to the Lithuanian town of Klaipeda, which, by its mere existence, resulted in a renegotiation of the pipeline contract with Gazprom. Similarly, the elimination of destination clauses in supply contracts weakened the Russian grip on the European market since companies started to use pipelines in different directions, as the European supplies to Ukraine currently show. Another aspect is the change of perspective on infrastructure in the European market: The fleet of underutilized LNG terminals in Europe can be seen as a sort of infrastructural insurance to keep long-term gas contracts under control. This looks especially relevant



in times of low gas demand in Europe, mainly due to the economic crisis, cheap coal and growing electricity generation from renewable energies. In this context, the influence of EU member states as market players has significantly been restricted, with more power given to the EU Commission as a watch-guard for the functioning of a liberalized market. The EU's role today is to be found mainly in enabling investments in infrastructure diversification, in reverse-flow and in interconnection capacity.

For gas suppliers, new market flexibility and the globalization of trade has offered opportunities for new actors to enter the scene, and put traditional gas producers under pressure to adjust their business model. Russia's gas monopolist Gazprom is a striking case in point. For decades, the relationship between Gazprom and its partners in Europe – except for some Central and Eastern European states with geographically unfortunate locations – was based on mutual dependency and stable supply relations. Today, Gazprom's customers are beginning to enjoy the freedom to choose their gas supply from a growing number of sources. Adding to that, the role of transit countries has turned out to be a risk factor to every gas trade relationship. In this new emerging market model, the blackmailing potential of transit countries has grown since other suppliers are ready to fill the gap in the case of supply disruptions, reducing pressure on the consumers. Finally, and most troublesome for traditional suppliers in the recent past, the European Union adopted a market model that seems to be in harsh contrast to what producers would see as preferable for their gas export: full control of the whole value chain from gas exploration over pipeline operation right through to the end consumer distribution. The planned South Stream pipeline across the Black Sea to Bulgaria was stopped by the EU Commission's veto against Gazprom's plans to have full control over the pipeline reaching into EU territory. As a result, Gazprom cancelled the project and turned towards investing in Turkish Stream, to access a growing Turkish market with an option to transit gas via Turkey to European consumers. But this project has also been put on hold due to growing tensions between Russia and Turkey after the downing of a Russian fighter jet violating Turkish airspace. In summary, stable and reliable long-term gas relations are under pressure from markets and politics while flexibility and short-term deals do prevail, even if they are not always the cheapest option for consumers.

This short analysis reveals the following: First, natural gas markets become more flexible and the consumer has a strong voice in defining the rules of the game. The EU Commission's regulatory power has even pushed Gazprom to start spot market trade and to cancel destination clauses in gas contracts. Second, due to the risky investment in an increasingly volatile market environment, suppliers are trying to avoid additional risk factors, such as transit countries. Gazprom's main aim seems to be to access the European market without relying on goodwill or risking blackmailing by Ukrainian or Turkish transit pipeline operators. As a result, it plans to build the 'Nordstream 2' pipeline, which would enlarge the existing direct connection between Russia and the European market. At the same time, Russian companies are also investing in LNG in order to benefit from the new market flexibility. This follows a step Norway's Statoil had already taken a couple of years ago.

The changes in gas relations as well as the globalization of gas markets have been a fascinating process over the last couple of years and will affect the role of natural gas in global energy supply in the future. For the next approximately ten years, a couple of assumptions can be made. First, although the LNG market will grow on a global scale, oil-indexed long-term contracts are still able to compete under the current oil price developments.

Especially in Europe, the growth of LNG will be limited due to cheaper pipeline gas coming from Norway and Russia. The mere existence of LNG terminals, however, guarantees a higher degree of supply security. Second, most of the new pipeline projects will connect producer and consumer countries directly. The existing transit business (through Ukraine, Belarus) will most likely not be extended further, and future projects with transit (mainly through Turkey) will be realized only on a limited scale. Third, compared to other regions in the world, Europe's domestic resources are depleting, and a shale gas revolution is not taking place. Only the Mediterranean, the Black Sea and some smaller projects offer real prospects for exploration. If energy efficiency and other energy sources are not compensating for the decline in domestic production, Europe will need to import more gas in relative and maybe even in absolute terms. Hence, the European situation is completely different from other regions where demand is set to increase dramatically, where new exploration is taking place and shale gas could play a significant role. In the future, demand in other parts of the world may grow, and supply of natural gas will be less abundant. The challenge for Europe is therefore to make use of today's comfortable situation to prepare for a more uncertain future.

The new energy world and emerging security challenges

Changing patterns in oil and natural gas markets do not only influence prices and market dynamics. They also have implications for other policy areas, especially questions around security beyond guaranteeing stable energy supplies. For many years, the dichotomy of OPEC producers versus the Western world or the trust-building nature of mutual dependencies between European states and Russia were considered common sense in geopolitical considerations. The analyses of these constellations are in need of a revision. The energy world order is in flux, which creates new challenges and requires new answers. New dependencies and the emergence of new actors are the central features in this context. Four strategic trends in the energy world are set to influence security policies in the future:

Not access to energy sources but access to markets is crucial

The security dimension of access to energy sources as a common concern has been officially recognized since the first oil crisis in the 1970s. Access to energy also used to play a vital role in military conflicts. The US strategy to guarantee stability in the Middle East was based, among other aspects, on an overall strategy to secure a stable flow of oil from east to west, namely from the Gulf to the US. European countries have silently benefited from the role of the US as a caretaker of European energy security. In a world of temporary abundance of resources, military engagement to secure access to supplies has lost significance, especially for the biggest supplier of liquid fuels in the world, the US. This does not imply, however, that stabilization in the Middle East lost its geopolitical meaning. Energy's decisive role is just fading.

New challenges are now emerging for supplier countries, especially among those states that would like to access the market and are hindered for geographical and/or economic reasons. The most prominent example here is Iran with its vast resources of oil and gas. Due to current price developments, attracting investors and starting its comeback as a major producer has turned out to be difficult. Saudi Arabia's low-price strategy is seen as the main cause, and a further escalation of the conflict is possible. Others, such as Azerbaijan, Turkmenistan or the Kurdish region in Iraq might see difficulties entering markets in the future due to their geographical location. Dependencies of those countries on other states (Russia, Turkey) are set to increase and might result in regional conflicts. Enabling market access will be crucial for solving conflicts.

Instability and intra-state conflicts in supplier countries

The decline of oil and gas prices has just begun to have an impact on resource-rich economies worldwide. So far, many producers have been able to adapt to the new situation. Minor reforms, cuts in subsidies and currency devaluation helped to overcome a first year of stagnation. However, if the situation continues or prices drop even further, the stability of many rentier economies is at stake. The danger of intra-state conflicts and regional instability is increasing drastically. First on the list are those states with high production costs, a large share of income from fossil fuel exports, and unstable political systems. This certainly applies to Venezuela, where election results are disputed and painful reforms are on the agenda for anyone who will be in charge. Nigeria is also a candidate for growing ethnic intra-state conflicts. In North Africa, Libya's future in a low oil-price scenario might grow even more difficult than it is today. Algeria could also be affected soon, with low income from gas exports due to oil indexation. The consequences of North African uprisings some years ago might also influence regime reaction in a more restrictive way. Bigger economies such as Russia will be able to withstand a longer period of low commodity prices, but harmful spending cuts will be required here as well. In combination with Western sanctions, this could result in even more aggressive measures towards its immediate neighbors. Finally, the Arabian peninsula will be forced to reform in economic and fiscal terms. As many historic examples of economic downturn show: The search for an outside enemy could be a cover for painful domestic reform. Radicalization and polarization in the political systems are likely as well. All in all, dangerous developments for global security are looming.

The new influence of strong consumer states

A low-price environment generally tends to put more power in the hands of consumers. In terms of energy policies, the regimes of resource-rich states are in greater need of foreign support and investments, mainly to keep rentier economies running and guaranteeing future income. This is especially true for countries with a low GDP, a high share of fossil fuel exports or inaccessible deposits. Under current market conditions, it is difficult for developing states to find investors for their newly discovered oil and gas resources. International oil and gas companies are cutting back on spending and show little interest in investing in risky environments. This offers an opportunity for state-owned companies from emerging economies such as China to step in and support those regimes with loans and investments. By doing so, in a time of frailty, long-term economic and political dependencies could emerge. The case of Angola is exemplary for this. In the long run, even Brazil might use external financing to support Petrobras in developing offshore oil exploration. Such investments create more political dependence on non-Western states, which is likely to have regional security implications. This might also be of geostrategic significance in the future, if the world moves into an era of limited availability of oil and gas again.

Traditional orders are dissolving

As this chapter has shown, traditional orders of energy relations are slowly disappearing, without clear patterns to follow. The US is close to self-sufficiency when it comes to energy supplies, while Europe is struggling to find its strategy dealing with a more complex energy world. Even more drastic are the changes on the supplier side. Today, OPEC is far away from being a cartel, it rather looks like a forum for discussion between some producer countries that has lost its political meaning. The aims and needs of OPEC members are diverging, leaving Saudi Arabia as the one single player that might have an influence on potential common OPEC action. Russia is trying to find its new position in global energy relations, being stuck between an unsatisfying endeavor towards China and a European market in harsh contrast with Russia's market model. This whole set of divergent interests and dissolving order offers both opportunities and risks. The result of this reshuffle is hard to predict. It is clear, however, that those who are set to lose influence will not accept this silently. This mainly applies to Russia and OPEC states besides Saudi Arabia. New alliances could create tensions that might also influence stability in other policy areas.

The day after tomorrow: More uncertainty to come

For most analysts, the massive drop in fossil fuel prices over the last two years came as a surprise. Even the most sophisticated scenario did not predict this to happen. Therefore, there is a lack of recipes for dealing with the new situation. It is also very likely that this is not the end of an era of uncertainty as far as energy market developments are concerned. Relevant factors in this context could be the shift away from fossil fuels due to national climate change legislation, the lack of investment in energy infrastructure including new production sites due to low prices, as well as unexpected economic developments. A time of rocketing energy prices and scarcity in the markets could be the result within a decade. We do not know how the future of energy looks like. We do know, however, that for Europe, increasing infrastructural resilience will pay off. To that end, a time of low fuel prices might offer a window of opportunity.

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