

## Recent Oil Spill Preparedness Developments in the Caspian Sea Region

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### Introduction

Natural seeps and easily exploited surface deposits of crude oil on land have been utilized in the Caspian Sea region earlier than 300 BC. The commercial usage of crude oil increased dramatically in the mid-nineteenth Century, with the drilling of the world's first oil wells near Baku in Azerbaijan, followed by the construction of the world's first purpose built oil tankers by the Nobel family, which sailed on the Caspian Sea in 1879. The ensuing oil boom continued into the twentieth Century, and the region was of strategic importance to the Soviet Union for its onshore and shallow water oil reserves. The end of the Soviet Union in the 1990s led to the newly formed independent States opening acreage to the international oil industry, heralding a new oil boom. The modern-day picture is a region (Figure 1) with oil reserves of global importance, facing a key challenge of the transportation of crude oil to markets. A significant proportion of the oil is transported to clients to the west, involving large volumes (approaching 100 million cubic meters per annum or 1.7 million barrels per day in 2014) moving via pipelines, rail and vessels to export terminals on the Black Sea or Mediterranean Sea.

Figure 1 Caspian Sea littoral States



The oil spill risks associated with the regions' oil exploration, production and transportation are recognised. Managing and mitigating this risk primarily focuses on oil spill prevention measures, though it is also prudent and necessary to ensure effective oil spill preparedness. From the international perspective, the overall framework for preparedness is established through the ratification and implementation of the International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990 (OPRC Convention). The OPRC Convention requires that a national response system is developed and encourages regional cooperation agreements for cases of a major oil spill. It also

promotes the participation of the oil and shipping industries, requiring suitable oil spill contingency plans for offshore installations, oil handling facilities and ports and harbours.

Recognising the benefits of working together, the Global Initiative (GI) was launched by the International Maritime Organization (IMO) and IPIECA (the global oil and gas industry association for environmental and social issues) in 1996. Working under the umbrella of the GI in the Black Sea and Caspian Sea, IMO, IPIECA (through the Oil Spill Preparedness Regional Initiative for the Caspian Sea, Black Sea and central Eurasia, known as OSPRI) and other members of the international community have been supporting governments' efforts to build and implement national and regional systems to ensure effective response to major incidents. The international community's concrete interest in this field also appeared clearly during the Ministerial Council of the Organization for Security and Cooperation in Europe (OSCE) held in Helsinki in 2008. This meeting "acknowledged the importance of preparedness and response capacity to combat oil accidents [...] and tasked the OSCE executive structures, within the framework of their mandates and existing resources, to support the participating States, upon their request, in the implementation of relevant commitments, taking into account the role played by relevant international organizations."

## Caspian Sea Regional Framework

There are a number of regional mechanisms around the world, establishing cooperation in cases of major oil spills. Many of these stem from the United Nations Environment Programme (UNEP) Regional Seas Programme and have their roots in the 1980s and 1990s. A typical arrangement is for a group of countries bordering a sea to have a regional convention for the protection of the marine environment, with a subsequent protocol or agreement under the convention that focuses on cooperation procedures in case of major oil spill<sup>1</sup>. The development of the OPRC Convention, which entered into force in 1995, served to provide a global framework under which these existing regional or multi-lateral agreements could be further strengthened.

However the Caspian Sea region did not form part of the Regional Seas Programme and following the end of the Soviet Union in the 1990s the legal status of the water body remains unresolved by its five littoral States. Notwithstanding the situation, all five States recognised the environmental stresses and threats to the Caspian Sea and worked together to establish a common approach to its protection. With the support of the international community, mainly working through the Caspian Environment Programme, the 'Framework Convention for the Protection of the Marine Environment of the Caspian Sea' (known as the *Tehran Convention*) was developed and signed by all five States in 2003, subsequently entering into force on 12 August 2006 (celebrated in the region as Caspian Day). The importance of this Convention for the region, being the first legally binding agreement between the five countries, cannot be overestimated and it marked a major milestone for Caspian Sea regional cooperation.

Up to 2015, UNEP acted as the Interim Secretariat for the Tehran Convention. However at the fifth Conference of Parties (COP 5) to the Convention held in Turkmenistan during May 2014, it was agreed that a Secretariat will be established in the region during 2015, initially based in Baku (Azerbaijan). This relocation of the Secretariat function into the region marks a constructive development and growing ownership of the Convention process by the littoral States.

The Tehran Convention provides the framework for specific actions under a series of protocols. The first protocol developed under the Convention was the 'Protocol Concerning Regional Preparedness,

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<sup>1</sup> For example, (a) the *Oil Spills Protocol to the Cartagena Convention* for the Wider Caribbean and (b) the *Prevention and Emergency Protocol to the Barcelona Convention* for the Mediterranean Sea

Response and Cooperation in Combating Oil Pollution Incidents' (known as the *Aktau Protocol*, being named after the city in Kazakhstan on the shores of the Caspian Sea where the document was signed). This Protocol was developed with significant support from the international community, most notably from the IMO. The finalized text was signed on Caspian Day in August 2011.

## The Aktau Protocol's Template for Cooperation

The Aktau Protocol's text is posted on the Tehran Convention website at <http://www.tehranconvention.org/>. Article 17 of the Protocol states that it will enter into force 90 days after the Depository of the Tehran Convention (being the Islamic Republic of Iran) has been informed of ratification by all five Caspian littoral States. Based on feedback from the littoral States and with the successful completion of the ratification process in four countries so far, it is anticipated that entry into force will occur in 2015.

The Protocol's Preamble references relevant international conventions and the Protocol's content largely mirrors the requirements of the OPRC Convention. Article 10 of OPRC encourages the development of multilateral agreements for oil pollution preparedness and response and the Aktau Protocol is a manifestation of this. Therefore, those littoral States that have ratified and implemented the OPRC Convention are already well placed to contribute to the implementation of the Protocol. Amongst the Protocol's key provisions are as follows, with specific Articles of the Protocol indicated:

1. The Contracting Parties shall establish a regional mechanism. The procedures for such mechanism shall be considered and consequently adopted by the Conference of Parties [to the Tehran Convention]. *Article 4(3)*
2. For the purpose of the operational implementation of this Protocol, a Caspian Sea Plan concerning Regional Co-operation in Combating Oil Pollution in Cases of Emergency shall be established by the Contracting Parties. *Article 4(4)*
3. Each Contracting Party shall establish a national system of operational response to oil pollution... (*Article 5*)

A regional workshop was held in Baku during June 2012, hosted by the State Maritime Administration of the Republic of Azerbaijan with support from IMO, UNEP and OSPRI. The event was attended by delegates from the five littoral States, as well as international organizations and the private sector. The objectives of the workshop were to:

1. Review the status of oil pollution response preparedness nationally and regionally.
2. Review the history of regional developments in pollution preparedness.
3. Review and evaluate the 2005 [draft version of] regional oil spill contingency plan against the current situation and identified needs.
4. Identify any barriers to effective implementation of the regional plan.
5. Strengthen relationships and cooperation between Caspian countries and with industry.
6. Identify gaps and define the way forward in finalizing and implementing the regional oil spill contingency plan.

Various technical presentations were used to illustrate the different aspects of preparedness and response to oil pollution incidents. The presentations focused on incident management, response operations and response strategies, as key elements of an efficient response to an oil pollution incident. Contingency planning and the requirements of the relevant international instruments, i.e. the OPRC Convention, the *1992 Protocol to the International Convention on Civil Liability for Oil Pollution Damage*

(1992 CLC) and the *1992 Protocol to the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971* (1992 Fund Convention), were also discussed. A review of the draft regional plan and identification of a possible way forward towards finalization and implementation of this plan were also undertaken and discussed in detail. During the workshop, participants had the opportunity to learn from each other and to identify recommendations for progressing the regional plan, recognising that the Aktau Protocol was in the process of ratification by the littoral States. The diversity of participants and their active participation were important factors towards the success of the workshop.

There was also significant consideration with regard to the approval process for the regional plan, once finalized, and dialogue as to whether this should be put forward to the Conference of the Parties (COP) of the Tehran Convention for consideration and approval or whether approval should be sought via another mechanism. It was ultimately agreed that putting the plan, which may need to be updated regularly, to a formal political body such as the COP may create a cumbersome and lengthy approval process, which is in conflict with the need to be able to regularly review and update the plan, based on elements such as changes in national level structures/contacts, modifications based on lessons learned from actual incidents, etc.

It was agreed that a cumbersome approval process should be avoided, to allow the necessary flexibility for updates, as needed. Discussions on how plans were adopted and approved in other regions, in particular based on the experiences of the Russian Federation (Baltic Sea, Black Sea and North West Pacific Action Plan [NOWPAP] agreements) and Iran (Regional Organisation for the Protection of the Marine Environment [ROPME] regional plan), identified that a more practical approach was preferred and that this should be re-examined once the plan was finalized. As such, the following way forward was agreed by those present - this to be undertaken in parallel with the ratification of the Aktau Protocol to facilitate its implementation once it is in force:

1. IMO to initiate an update of the regional plan;
2. Countries to complete the national level information that will be included in the annexes to the Plan and forward to IMO;
3. Plan to be consolidated with both sets of information and status report submitted to the COP;
4. Consolidate plan (updated plan/annexes) to be distributed to countries;
5. Countries consultation and commenting period on consolidated draft;
6. Updated plan with comments received by IMO; and
7. Finalized draft produced and circulated for final agreement and subsequent adoption.

At the first Preparatory Committee Meeting (PrepCom) for the sixth Meeting of the Conference of the Parties (held in Baku, 24-27 November 2014), with the entry into force of the Aktau Protocol anticipated, it was proposed that a further regional workshop will be held in summer 2015 to map out the implementation of the regional plan through a training and exercise programme, as described in the Protocol's Article 5(4), and with the increased involvement of the private sector. There will also be a requirement to consider options to establish the regional mechanism under the Protocol, whose functions are described in Article 13 as follows:

1. The regional mechanism shall assist the Contracting Parties in reacting promptly and effectively to oil pollution incidents.
2. The functions of the regional mechanism shall include:

- a. Establishing close working relationships with the Competent National Authority of the Contracting Parties and also, where necessary, with relevant international and regional governmental and non-governmental organizations and bodies dealing with oil pollution incidents;
- b. Coordinating regional activities with regard to technical co-operation, training, exercises, and providing expertise in cases of emergency, and assisting national activities in these fields;
- c. Collecting and disseminating information on oil pollution incidents (inventories, expert opinions, reports on incidents, technical progress for improving contingency plans, etc.);
- d. Preparing systematic procedures for data and information exchange concerning oil pollution incidents;
- e. Acting as the focal point for exchanges of information on techniques for surveillance of oil pollution incidents in the Caspian Sea;
- f. Making proposals on updating of the Caspian Sea Plan concerning Regional Co-operation in Combating Oil Pollution in Cases of Emergency;
- g. Performing such other functions as may be required by the Conference of the Parties.

How the regional mechanism is developed is likely to be decided following the establishment of the Tehran Convention's Secretariat within the region (replacing the interim Secretariat). This will be the subject of high-level diplomatic discussion and political decision making.

## National Planning Developments

The fundamental framework for oil spill preparedness is a national system for response, as stipulated in Article 6(1) of the OPRC Convention. The central pillars of this system are:

- a) the designation of (i) the competent national authority or authorities with responsibility for oil pollution preparedness and response, (ii) the national operational contact point or points, which shall be responsible for the receipt and transmission of oil pollution reports, and (iii) an authority which is entitled to act on behalf of the State to request assistance or to decide to render the assistance requested;
- b) a national contingency plan (NCP) for preparedness and response which includes the organizational relationship of the various bodies involved, whether public or private, taking into account guidelines developed by the IMO.

In addition to these two pillars, the national oil companies constitute in some countries, such as Azerbaijan, a key player in the interactions between the international oil companies operating in the Caspian Sea and the national authorities. Therefore, their own corporate contingency planning may play a critical role in enabling a coherent and effective response capacity at a national level. In that perspective, the level of consistency of national oil companies' corporate plans with the NCP is an important factor impacting national response capacities' effectiveness. The actual consistency between these two layers of contingency planning in the wider public sphere is far from a given, as national oil companies in post-soviet states tend to have inherited from complex and sometimes contradictory internal regulations in this regard.

An NCP sets overall oil spill response organization and policy. This is important for operators of oil facilities and ports when developing their own oil spill contingency plans, which should integrate with the NCP. The NCP is equally important when considering how functional regional cooperation is

developed. Regional cooperation mechanisms do not usurp or replace NCPs; rather they act to ensure NCPs contain procedures to efficiently request assistance from, or render it to, their neighbours or those offering/requiring international assistance.

In the Caspian Sea region, both Azerbaijan and Kazakhstan have been developing their NCPs over recent years and these serve as examples of how NCPs necessarily take time to evolve and embed, requiring the engagement of varied stakeholders to ensure ownership and awareness across government administrations and the private sector.

### Republic of Azerbaijan

Azerbaijan originally drafted an NCP in 2005 with financial support via the European Bank for Reconstruction and Development (EBRD). Changes in the government's structure prevented finalization and approval of the draft National Plan. In December of 2005 the Ministry of Emergency Situations (MES) was created and in 2009 MES took on formal responsibilities relating to oil spill preparedness as the National Competent Authority under the OPRC Convention. In 2009 the draft National Plan was reviewed and updated by MES, to reflect current government organization and to clarify roles and responsibilities. This review was undertaken in cooperation with the oil industry.

In 2010, the MES conducted an assessment of the national legislative and regulatory framework of Azerbaijan in regards to oil spill preparedness and response, with financial support from the Organization for Security and Cooperation in Europe (OSCE) Environment and Security (ENVSEC) Initiative, through the OSCE Office in Baku. The strategic recommendations regarding the regulatory and institutional framework were that Azerbaijan:

1. Fully implements the requirements of the OPRC Convention nationally whilst working towards greater regional co-operation, through:
  - Adoption of the NCP which needs to be fully tested and exercised with other key stakeholders, in accordance with the guidelines developed by the International Maritime Organization.
  - Establishing a minimum level of pre-positioned response equipment, a programme of exercises and training, detailed action plans and communication capabilities, available around the clock.
2. Considers the means of developing and establishing such preparedness and response arrangements. In particular, ensure that sufficient compensation is available, commensurate with Azerbaijan's risks, through the selection and ratification of the various different International Compensation Fund schemes.
3. Azerbaijan has a multi-agency approach to oil pollution prevention and response. Identified, accepted and practiced roles and responsibilities for the various agencies involved in a response will enable an effective response and an adequate level of preparedness.

In November 2011, OSCE and MES co-organized a national workshop on compensation and liability regimes, which raised the awareness of national stakeholders on current oil spill developments and priorities. The following recommendations were developed:

- Promotion and implementation of the NCP and support to the implementation of the Action Plan developed by MES;
- National implementation of the application of the Aktau Protocol;
- National implementation and integration of the draft Regional Plan on Cooperation in case of major oil spills in the Caspian Sea;

- Denunciation of the 1969 CLC Convention;
- Consideration on ratification of the 1992 Fund Convention;
- Review compensations under the LLMC<sup>2</sup> and Bunker Convention<sup>3</sup>;
- Initiate consideration on mechanisms for future funding of the NCP;
- Consideration on the introduction of the International Oil Pollution Compensation Fund Claims Manual into the NCP

In order to further strengthen capacity building, OSCE arranged a study tour to Norway for representatives from MES, the Ministry of Ecology and Natural Resources and the State Maritime Administration. This tour included sharing Norway's experiences with contingency planning, and compensation mechanisms and funding models for oil spill preparedness under the OPRC Convention.

In 2012, the OSCE Office in Baku and the MES built on the renewed interest generated by the study tour to finalize the NCP in line with the draft regional plan. Benefiting from the OSCE's technical assistance, the MES adjusted the draft NCP in order to improve its compliance to international standards as well to take into account a renewed institutional framework in Azerbaijan's energy sector since the first drafting of the plan seven years earlier. A national conference jointly organized by the MES and the OSCE Office in Baku in December 2012 allowed securing political support for the draft plan from a wide range of state agencies.

In 2013, while the Government reviewed the draft NCP for final approval, several side activities allowed preparation for the next steps. A workshop was organized by BP in conjunction with MES in June in order to share recent international experiences, particularly with respect to dispersants (including subsea use) and in-situ burning. Furthermore, the OSCE Office in Baku provided technical assistance to the State Oil Company (SOCAR) for the development of its corporate contingency plan. SOCAR presented its new plan, compliant with the draft NCP, in a conference jointly organized with the OSCE in December.

When approval to the NCP is granted, there are a number of areas preliminarily identified for focus in the implementation of the Plan:

1. Governance

- Scope of the NCP, and, in particular, tentative definition of threshold for competence of the National System over individual responsible parties;
- Constitution of the National Oil Spill Council (Government side), and possibly a National Oil Spill Contingency Plan Steering Committee;
- Constitution of a national representative body for the private sector.

2. Unified management and command of incidents

- A 24/7 reporting and notification contact point;
- A unified management and command – derived from clearly stated roles and responsibilities;
- Exercise policy.

3. Operational preparedness

- Testing of dispersants and list of approved dispersants;

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<sup>2</sup> Convention on Limitation of Liability for Maritime Claims

<sup>3</sup> International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001

- Solid / liquid waste management plans;
- Access to computerised oil spill modelling;
- Tactical response plans and sensitivity maps.

4. Participation in the development of the regional mechanism under the Aktau Protocol.

## Republic of Kazakhstan

Kazakhstan originally approved an NCP in 2000. Work commenced to revise this plan in 2010, taking into account governmental changes and the increasing oil industry developments. A national planning seminar was held in 2011, bringing together the range of involved Ministries, the local oil industry operators and organizations able to share their experiences from other countries. This forum provided an opportunity to discuss international guidance from IMO and included inputs from Turkish government representatives, as they had recently been through the process of developing and finalizing their NCP.

Under the coordination of the Ministry of Oil and Gas, a new NCP was drafted and sent to other Ministries and interested stakeholders for review. A finalized version of the NCP was approved by Decree 422 of 6 April 2012. The finalised document embraced the principle of tiered preparedness and response, underpinned by net environment benefit analysis when planning for and choosing response options. Table 1 lists the main sections of the NCP. The approved NCP contains an Action Plan for its implementation. The implementation phase is providing the opportunity to address outstanding organizational and technical aspects of preparedness that are not addressed in detail within the NCP. This includes the organization of response at the sub-national level in Kazakhstan (so-called Oblasts) and the consideration of a detailed set of regulations and procedures for the use of dispersants and in-situ burning.

Operators in Kazakhstan are developing and testing their facility oil spill contingency plans under the new National Plan. For example, the North Caspian Operating Company B.V. (NCOC) held a major exercise in Atyrau during June 2013, with involvement of the emergency authorities of Atyrau and Mangystau Oblasts and the Ministry of Emergencies. The first stage of the exercise was aimed at testing oil spill response at the Oblast level, whilst the second stage targeted the efficiency of mobilization of oil spill combating resources from the international industry cooperative (Oil Spill Response Limited, OSRL) headquartered in the UK. OSRL equipment was successfully mobilized to Atyrau airport and passed through customs procedures.

In early 2014 a new Civil Protection Law was passed, consolidating the existing legal framework under one instrument. Furthermore, in August 2014 the government underwent a major re-organization that included the reduction in the number of Ministries from 17 to 12, with a number of oil spill preparedness issues subordinated to a new Committee structure under the new Ministries.

In 2015 activities are underway to align oil spill preparedness to the new governmental framework. This includes consideration of amendments to the NCP and key Laws, including the Environmental Code and the Law governing offshore oil exploration and production.

## Conclusions

There has been considerable focus on developing oil spill preparedness in the Caspian Sea region. This has involved the governments, regional bodies, the oil industry and a range of other stakeholders and international organizations (notably UNEP, IMO and OSCE). This effort is in addition to the primary focus on preventing spills.



The Tehran Convention's Aktau Protocol is anticipated to enter into force during 2015. This will lead to the consideration of an appropriate regional mechanism for cooperation, with operational coordination enacted through the finalization and implementation of the Caspian Sea Plan Concerning Regional Cooperation in Combating Oil Pollution in Cases of Emergency.

Countries are developing and implementing National Contingency Plans in order to have effective national response systems, which also act as the basis for regional cooperation. Azerbaijan and Kazakhstan present examples of on-going progress in this area. The oil industry is playing an active role in these national planning developments, in alignment to the requirements of the OPRC Convention, the Emergency Protocol and the Aktau Protocol.

Table 1 Main sections of Kazakhstan's NCP (translated from Russian original)

Section	Title
1.0	GENERAL PROVISIONS
2.0	OIL SPILL PREVENTION
2.1	Oil spill prevention activities
2.2	Planning of measures towards oil spill prevention and response
3.0	OIL SPILL RESPONSE
3.1	Classification of Oil Spills by Tier and Origin
3.2	Informing about oil spill and response operation progress
3.3	First-tier and Second-tier Oil Spill Response Measures
3.4	Third-tier oil spill response measures
3.5	Oil Spill Response of the State Authorities
4.0	OIL SPILL RESPONSE MANAGEMENT
4.1	Health and Safety of Personnel Engaged in Oil Spill Response and Population
4.2	Oil Spill Response for Sea and Coastal Waters on the Open Sea
4.3	Mechanical oil containment and oil collecting from water surface
4.4	Use of chemicals (sorbents, dispersants)
4.5	Oil Spill Burning
5.0	OIL SPILL REMEDIATION ACTIONS
5.1	Response Measures, Oil Collecting and Remediation of the Environment
5.2	Disposal of Collected Oil
5.3	Oil Spill Response Reporting
6.0	INTERNATIONAL ASPECTS OF OIL SPILL RESPONSE
	Action Plan for Implementation of the NCP
	Oil Spill Notification Form