Brazil Wave November 2016 Special seminar issue MARKET TRENDS What to expect, explained by Westshore Brasil BRAZILIAN FLAG How the local flag has never been more important THE TANKER DESK The panel debates the lack of infrastructure supporting offshore Brazilian E&P **WESTSHORE**



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Deep Sea Supply awarded 2 prizes for outstanding work in the Brazilian offshore Market

People involved in the offshore business are aware of how hard it might be to keep a vessel trading in the spot market nowadays. Poor rates and low demand discourage owners to keep more than 2 vessels working in the spot. Yet, Deep Sea Supply didn't seem to be intimidated by that.

Westshore was glad to announce that the Norwegian company won 2 prizes in the year of 2016. Deep Sea was awarded for the company that worked the most in the spot market, totalizing 78 days of charter. Also, the company was Westshore's number one partner, with a total of 5 contracts fixed. Congrats!



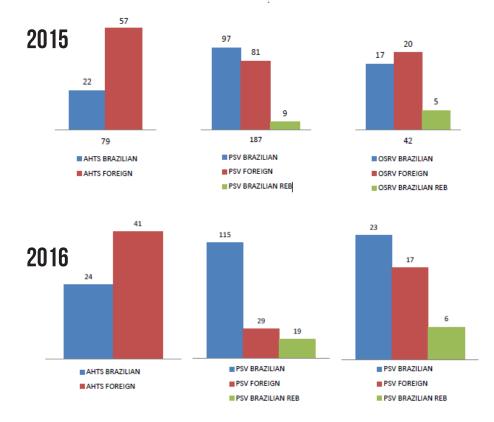
WHAT TO EXPECT

Market Trends, presentation held by Joana, Paula and Wilson

by Paula Quirino

ast October, we held the annual
Westshore Brasil Offshore Seminar in
Rio de Janeiro and, traditionally, the
first hour was dedicated to our market
analysis and trends presentation, and this
article contains a summary of the most
important topics discussed.
The OSV fleet currently in Brazil
reduced in about 8% compared with last year's
figures, totaling 412 vessels nowadays. There is
29% of foreign flagged vessels in Brazil, being the
remaining 71% Brazilian flagged or under REB.
Only a couple of years ago (and almost for about a
decade before) there was a balance between foreign
and Brazilian OSVs. As of this year, we understand

that the 30/70 ratio will remain fairly stable, as well as the total number of vessels in the country. Since PSVs, OSRVs and AHTS represent the majority in offshore support, these vessel types were impacted the most in this period, as presented in the graphs below. As a consequence of the largest operator Petrobras focusing more on production than on drilling activities, essentially PSVs had an important drop of almost 13% during last year, especially the foreign flagged ones, which suffered with "blocking" from similar Brazilian tonnage and with contract cancellations. Meanwhile, other 11 unemployed PSVs and OSRVs were registered under "REB" (Brazilian Special Register) in order to try and secure a contract more easily, and if not, most of them ended up leaving Brazilian waters. Going the opposite way, OSRVs slightly increased in number and reflect how the Brazilian/foreign fleet ratio has indeed been impacted.

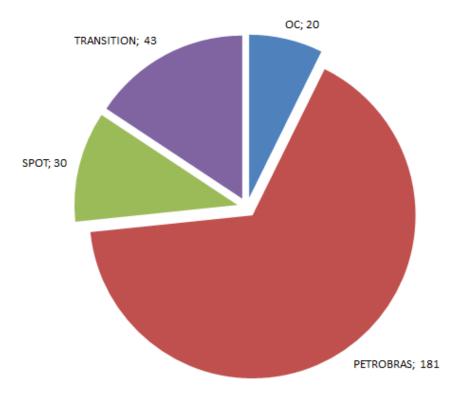


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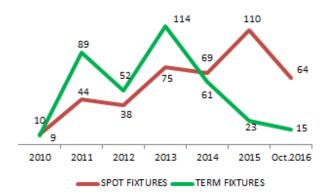
Nonetheless, if we consider the 274 PSVs, OSRVs and AHTS of any flag, only 73% are currently employed with Petrobras and other charterers, 11% of them hope for an opportunity in the spot market and 15% are not ready to operate due to ongoing repairs, lay-up, lack of CAA (chartering authorization from Antaq) or of proportional importation taxes paid (in "transition"). If we compare with 2015, all three main vessel types had their availability increased in about 45% this year, being the greater part PSVs, which have become a commodity and far more difficult to employ, unless adapted to other types/scope of work still demanded, as for example RSV, SDSV, DSV and OSRV.

Although the market is presently offering high vessel availability to charterers with competitive rates, the Prorefam (OSV fleet renewal program from Petrobras) has 29 vessels on their way to be built and delivered to the oil company, being 19 PSVs and 10 AHTS from five large shipowners. After seven Prorefam tenders, 87 contracted vessels of many types are already in operation, while 7 contracts were cancelled mostly due

to delivery delays. As the daily rates fixed for Prorefam are higher than the current market rates and Petrobras does not need to increase its fleet, it is still uncertain if all 29 vessels will really be built, and if they do, those vessels will gradually replace similar foreign vessels types that are presently chartered to the oil major, not add up. The number of fixtures in Brazil was deeply impacted in the last couple of years, but not in the same extent in regard to the duration of the contracts. While spot fixtures increased in 2015 due to a high number of drilling rigs leaving the country, thus needing short term support, the number of term fixtures had a sharp drop as Petrobras and other oil companies were already struggling with the low oil price and other particularities. In 2016, the spot fixtures had a drop, given the stable number of drilling rigs of about 31 units and arrival of two new FPSOs per year, and the term fixtures number is a little lower than last year, with potential of increasing with, for example, Petrobras ongoing tenders being concluded with the hire of few PSVs, RSVs and/or OSRVs.



NUMBER OF FIXTURES



TERM - VESSEL DAYS FIXED



SPOT - VESSEL DAYS FIXED



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If we consider the firm number of days fixed in the spot market, so far 2016 is also below 2015, with no forecast of beating last year's figures until December. In regard to the term market, 2016 can surpass 2015 in firm number of days fixed, depending on the contracts already in the last phase of negotiation. Thus, looking ahead, we understand that the demand will gradually pick up and absorb part of current OSV availability. Besides Petrobras, the companies Shell, Petrorio, QGOG, Saipem, Total and Karoon have ongoing or upcoming long term requirements mapped out, focusing mostly on medium/large PSVs and few AHTS

to start operating until the end of 2017. Total is the only operator of the Equatorial Margin that is currently selecting its fleet for that drilling campaign. Other companies with blocks in that region like Shell, PremierOil, BP, QGEP and ExxonMobil are either preparing campaigns for 2018 or applying for a postponement of this deadline with ANP, usually alleging delays in obtaining mandatory licenses.

As we could notice, the deeply changing market scenario from last year gave way to a more stable scenario, even though still uncertain in some aspects. Daily rates are an example of how steady they have been since late 2015, tending to remain in a low level for a while and, depending on the operators' moves in the next few months, they should start increasing bit by bit. The bottom line is to get prepared for the market upturn in the next couple of years, since the opportunities and the capacity are there, and are a reality.

Local flag has never been so important...

ANTAQ's presentation By Alexandre Vilela



Seminar Special

ertainly one of the most awaited discussions of the day, the session with ANTAQ has been a high point of the 2016 seminar. Without detriment to the other excellent discussions, but the topic of local flag and the new reality, driven by the market, of the need of local flag in many vessel categories has become the point of immediate attention. And so, the care with every word presented by ANTAQ was there, with owners and operators expecting ANTAQ to provide some relief or more clarity over the polemic topics listed by Westshore on the programme.

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The audience was graced by a short corporate presentation. ANTAQ seemed from the start interested in having a debate. And that was most appreciated by all. As a matter of fact, Westshore and the audience recognized ANTAQ's current leadership profile, for being open and courageous enough to attend any contact requests, meetings or seminars, always open to analyze the demands of the market, trying, pro-actively and openly to understand the challenges of the industry. The presence in the Westshore seminar and their openness to discuss the subjects in question and not hide behind 40 minutes of a unilateral presentation were the evidence of that.

Tonnage and REB though barges, legitimate?

Not only legitimate, legal. ANTAQ have made it clear: owners bare boating barges in order to obtain tonnage will have to prove the tonnage is being used. ANTAQ will stay vigilant to simulations in the industry and will punish those who abuse the system. That owner however which is a legitimate owner of classed offshore barges, as any other offshore tonnage, will have its right to use its tonnage protected. And that is irrespective of using the barge at a certain frequency, as the use of a PSV or an AHTS is not in question, or vessels under lay-up or stopped at anchorage will now be deducted from the owners tonnage? Yes, it is known that barges are "cheap tonnage" and certain companies fear that this may become an easy path to protect foreign tonnage under REB flag, in detriment of vessels built in Brazil. Well, this right is valid to every owner. It is not possible, under the current legislation to isolate offshore tonnage by its aggregate value. That is the nature of the game.

Blocking a vessel or a requirement?

ANTAQ has made clear that the circularization is made based on a vessel requirement. It is nor the fact that an EBN is responsible for the circularization, neither the fact that an oil company may be an EBN that matters. These are discussions on the side. Technically, what is placed on a circularization is the NEED for a certain vessel type. In the case of Petrobras, for instance, EBN currently responsible for the highest volumes of circularization on the market, it has been agreed that the Adendo B of a certain tender will determine the minimum vessel configuration needed. ANTAQ will use that in order to establish if a blocking vessel is or not proper to block. If the circularization is made by an EBN having as end user an oil company which is not an EBN, what should be circularized is the requirement from the end user, and not the

specific technical aspects of the vessel in question. ANTAQ will always invite all interested parties to participate in cases or forceful resolution.

Oil company being the EBN = process not transparent to blocked owner:

ANTAQ has been challenged with the fact that, when a circularization is made by the oil company, i.e. Petrobras as EBN, the SAMA system would allow for Petrobras (as EBN) and the blocking owners to have all access to the blocking information, however, the vessel owner being blocked would stay alienated from the process, since Petrobras is no longer reporting the details about each blocking. ANTAQ was clear that the parties addressed by the law are the EBN circulating the opportunity and the EBN blocking the circularization. Anything outside these parties would need to be discussed and agreed on a higher level, possibly with a change on the legislation. And this is why ANTAQ is not able to promptly open the full array of information, in as much as ANTAQ understands that interested owners are effectively being left out of the loop. In that respect, ANTAQ has recognized that after the process is closed, that is, a blocking becomes successful with a local owner being hired in replacement of a foreign owner, ANTAQ would be in position to report the details - and they promised the audience a feedback and follow up on the SAMA system in such respect. Before this moment however, during negotiations, ANTAQ sees an issue where the opening of such information may conflict with Petrobras' interest (as EBN) to protect its commercial information during a blocking process. Again, one is not debating the fact that an oil company is an EBN, and Petrobras is not the only one in this

Partial blocking and the timing for the blocking process: It has been made clear that the circularization may be issued up to 180 days prior to the vessel entering the service, and 180 days would be the limit for the mobilization of a blocking vessel. The process of the 7 days for blocking is being closely watched by ANTAQ who promised to be extremely fast in determining whether a blocking is valid or not. That is, ANTAQ says that in few days - that is the 8th or 9th day after the seven days´ period ANTAQ intends to be ready to confirm whether the blocking is or not valid. The intention, as clearly stated by ANTAQ, is to allow the EBN circularizing the requirement and the blocking EBN to use the 60 days of the period to effectively negotiate and either close the charter and hire the local vessel, or unblock the circularization. Anything outside those periods (180 days, 67 days, 7 days) would bring the circularization to cancellation.

Abusing of the system:

ANTAQ is concerned with a growing number of speculative movements. From EBNs circularizing without an effective requirement trying to "check the market" to circularizations off the periods or being blocked by non-suitable ships, an array of non-conformance has been taking place. ANTAQ is somewhat limited on their law enforcement, and in this respect are preparing a new



public consultation in order to establish a clearer legislation with the rights and obligations of each party. In as much as the doubts were driven towards owners, ANTAQ made clear that they are also closely observing the non-conformances made by the EBNs actually raising the circularization, including those charterers that are also EBNs.

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Quality and safety do not matter, and that is the basic truth: Well, almost, but not exactly. Charterers have their minimum technical requirements for a determined opportunity, but they are also entitled to a pre-qualification of service providers where financial, safety, quality and other very relevant aspects will be analyzed. When a circularization is placed out in the market however, the EBN circularizing the opportunity will not be able, under the current system particularities, to establish the end user (charterer) minimum criteria for a contract. Not even when that EBN is the charterer in itself, i.e. Petrobras. By the letter of the law, it is the vessel technical characteristics, and not its performance, or even the owner performance behind that vessel is not encompassed on the technical aspects of a circularization. What that means is: a vessel which is suitable, but which owners may not be pre-qualified or may not be able to pass on charterers' qualification criteria will have the right to block. ANTAQ was then questioned, though, can that block be sustained? The answer was as precise as the current legislation allows: ANTAQ will call the parties and have an open discussion about the attendance of the Scope of Work as a whole. In cases where the blocking vessel and its owners are "clearly not able to attend the contract", even if the vessel specs are in principle valid for the blocking, ANTAQ may remove the blocking. "Clearly not able to attend the contract" is as objective as one can get in this moment.

The use of blockings to cancel foreign vessel contracts under

firm period:

There is a sensation that more contracts of foreign flag vessel have been cancelled than local flag ships have been hired, in special in the year of 2015. In the lack of more objective evidence in this respect but with a common understanding that this is correct, ANTAQ were asked how the agency has positioned in such respect and how they intend to position in the future in similar cases. ANTAQ have demonstrated that their role as regulating agency is to provide the system and the mitigation over blocking. They are not allowed, by principle, to interfere in the contractual relationship of a determined contract, and as such, not in position to request a charterer to cancel or not cancel a determined contract. ANTAQ have said in return, that they will not refrain from stating the facts and assisting the parties in determining what is correct. In such respect, if an owner which had his contract cancelled, requests the necessary evidence of the circularization process, ANTAQ will provide such. Anything outside the circularization aspect and into the contract cancellation clauses is then between the charterers and the Owners. It has been stated that companies have started law suits to question the early termination of the contracts, in order to establish whether the vessel has been replaced by a local vessel or not. In conclusion, the industry has arrived at a new time, where the low demand for ships has increased competitiveness. Owners and charterers are demanding ANTAQ, the SAMA system and the intervention to work fast and reliably. There is recognition that the system has evolved and that there is huge effort in trying to accommodate all points of view. ANTAQ has demonstrated being the first to recognize that there is however quite a room for improvement, which will come. An open dialogue is the path and ANTAQ is definitely following the path.

Seminar Special



Vetting Offshore

PRESENTATION HELD BY ALFEU ALCANTARA

he presentation held by the Marine Technical Adviser of Shell Group in Brazil, Alfeu Alcantara, discussed the regulatory elements involving maritime operations and liquid bulk terminal

According to Alfeu, from the national point of view, there is no structured quality assurance document for these activities. From the maritime side, the vessels are subordinate and audited according to the Administration Rules / 'Flag State' (the ships

flag) and the rules of the country where the vessel operates / 'Port State'. In this context evaluating the compliance with the regulations of the International Maritime Organization - IMO, endorsed by one Party and / or another, such as: ISM Code, ISPS Code, Marpol 73/78 etc.

Onshore, the terminals would be pending licenses issued by various national agencies: Environment, ANP (National Petroleum Agency), ANTAQ (National Agency of Waterway Transportation) etc.

Seminar Special

by Joana Rodrigues

However, when an incorporated company hires a vessel for an operation, it must conduct an assessment and approval process for that vessel, taking into account the elements of its safety management system. Simply accepting the certificates on board does not support the legal coresponsibility of the contracting company, for the cases of some kind of contingency on board. In this situation, the recommendations and good practices of the industries, gathered around the OCIMF – Oil Companies International Marine Forum. The most consistent tool for these ratings is called 'vetting'. The process of 'vetting' was largely explained during the lecture by Alfeu Alcântara. Still within the OCIMF environment, the terminals are evaluated and approved (or not) according to the requirements of Terminal Baseline Criteria. This document was also commented by the speaker, who aligned all the elements of management that should be established in a maritime terminal. Finally, how the interface between board and earth is realized during the operations of loading and / or unloading of products. According to the MTA Brazil of the Shell Group, there are no national regulations on this subject. This forces us to once again look outside our country and understand how international maritime trade activity operates.

We return to the context of OCIMF, which established a fundamental guideline for terminal operations and oil tankers and reached this interface between board and land - ISGOTT, International Safety Guide for Oil Tanker & Terminals. Concluding the discussion, Alfeu defined as necessary a process of self-regulation of the terrestrial activities for the maritime terminals and their interfaces with the ships, taking as a basic reference the good practices and recommendations of the oil & gas industry. In this way, Brazil would be at the same level as other countries with a large maritime movement, from the point of view of meeting operational, safety and environmental protection requirements, reaching board and land. About Offshore Vessel Inspection Database (OVID) The Offshore Vessel Inspection Database has been developed by OCIMF in response to a request

from its members to provide a database of offshore inspections broadly following the format of SIRE. Recognition that the offshore industry has different processes and procedures than the tanker world for assurance and chartering has been taken into account.

The aim of OVID is to provide a robust web based inspection tool and database of inspection reports; this will be underpinned with professional, trained and accredited inspectors. In the long term it is an aspiration that OVID will form that is central to the selection and assurance of offshore vessels enhancing the safety of operations in the industry. Benefits of OVID

OVID has been designed to provide a number of positive benefits to OCIMF / OGP Members and vessel managers. By utilizing a database where inspection reports are available to OVID participating members experience has demonstrated that inspection numbers will drop over time. Assurance checks as a part of the chartering process may be speeded up as the assurance personnel have access instantly to credible information on the vessel and its safety performance.

OCIMF members have cooperated to develop a common inspection document and format that will eliminate the need for inspectors to conduct inspections using a core document and client specific supplements; this should simplify the inspection process for both inspectors and ships staff and also provide assurance personnel in the oil companies with increased confidence in the inspection report content.

The provision of a document detailing vessel/ unit principal dimensions and equipment will give vessel operators the ability to 'show case' its capabilities and provide a tool to project teams to prescreen vessels that are capable of undertaking the required activities. Having this document controlled by the vessel/unit operator allows for rapid amendment to reflect upgrading activities, and hence allowing project teams to quickly evaluate the vessels new capabilities.

Proactive owners of offshore vessels will quickly see the benefit of keeping an active inspection on the database as it will streamline the pre chartering process and, for competent vessel operators reinforce their positive image with the clients. Source: https://www.ocimf-mtis.org/

TANKERS DESK, LOGISTICS FOR THE OIL INDUSTRY — INFRASTRUCTURE

DANIEL BUCKLEY

Tanker Broker Westshore do Brasil

> n our recent Westshore Seminar, we had a panel to debate the infrastructure (or lack of) to support the E&P industry in Brazil, from offshore drilling and production to offtakes and oil exports.

Our guests for this panel were Mr. Gustavo Franco, Director, N&N Navegação/Triunfo Logística and Mr Felipe Dias, Fleet Manager, Teekay Offshore together with Daniel Buckley, Westshore Tankers.

Mr Franco opened the debates addressing Law #8630/93 that sets forth the Ports rules, operations, responsibilities and the need for a review in order to be more effective, investor friendly and brought up-to-date to reflect the current market requirements.

Triunfo's cutting edge operational base in Rio de Janeiro comprises 50.000 sqm of bonded storage space, multi-modal access, fully equipped and capable of accommodating 40 PSVs at one time. The current mode is emphasizing declining costs and focusing on optimization.

When asked about his outlook for the chances of new infrastructure being implemented to attend the increased demand for liquid bulk – in particular CPP – Mr Franco stated that there are a number of issues preventing this such as the changes required to Law #8630, the small number of clients any particular Terminal would count on to justify the investments and Government approval and licenses' demands/compliance.

Moving on to the Oil requirements, we covered the overview of the current trend that we describe a follows:

*Petrobras: By far the most important player,
Petrobras has a very comprehensive logistics set up
that allows control and flexibility. The only player
with maritime tank terminals, the distribution can be
performed at ease, with shuttle DP Suezmaxes loading
off the FPSOs and delivering to the terminals for
onward shipment to the refineries or exports whichever
the case. Once the cargoes are consolidated in the
shore tanks, the long haul ships – Aframaxes, simpler
Suezmaxes or VLCCs given the grades/sizes – can be
programmed in line with their sales.

Furthermore, there is the added ability to distribute cargoes coastwise by means of Transpetro's own and chartered tonnage.

*Independent Oil companies: As opposed to Petrobras, not having shore storage implies limited options, namely exporting directly from the FPSOs or via transshipment.

The constraint of loading direct from the FPSO is that a more sophisticated Suez DP will be employed on a long haul rather than short shuttle runs.

As to the transshipment, again little alternatives: Most commonly, the Suez DP is sent to La Paloma anchorage in Uruguay meaning longer transit times, increased costs and still facing risks of weather conditions – not long ago we understand a ship had to wait over 10 days for suitable weather conditions. Alternatively, trials are being made by Repsol Sinopec Brasil off Santos roads with special fenders/arrangements, but still exposed to weather albeit primary results indicate that conditions in Santos are better in La Paloma in winter time.



in Santos are better in La Paloma in winter time. Inevitably the shorter haul on the vessels allow the maintenance of the current fleet size of two ships.

With the implementation of T-Oil at Port of Açu, a new dimension has been added to the transshipment options. The terminal is within a safe and protected harbour with suitable draft – currently 17,5 m allowing Suezmaxes and projected to be up to 25 m when VLs capable - and accommodating 3 Suez or VLs with their respective onloaders board to board alongside.

On a side note, there is a private facility in Açu with 5 tanks of about 2.000 cubic metres each, owned and operated by Edison Chouest, for the supply of marine gasoil to the offshore fleet.

Mr Dias corroborated with Teekay's own experience: Always aiming at efficiency and low costs, the transshipment option at Açu is an interesting option albeit needing to be in combination with La Paloma in view of the 90 days flag issue.

Teekay have already performed 2 transshipments at Açu – the very first demanding all usual arrangements/ adjustments for a first timer, took over 100 hours to be completed, the second already improved – with the plan being to run voyages on a triangular basis:

FPSO to Açu as many times as possible and one from the FPSO to La Paloma for flag purposes, all within the 90 days period.

Teekay are performing on the Brazilian coastwise with 11 Suezmaxes in total: For Shell with 4, Transpetro with 2 and 5 in Bareboat charter.

Taking into consideration that no major changes are expected for the near future as far as new storage facilities are concerned, the above scenarios should remain in practice for a while.



by Luiz Monteiro

il at \$50 dollars has meant a total overhaul in how the market approaches strategic planning. From shipowner to oil company, the playing field has changed. As part of the annual seminar, Westshore invited Ilton Rosseto, President Director of PB-Log to discuss the sharing of resources, optimization of equipment and the provision of integrated services.

There are so many barriers faced when searching for optimization. Each company has its own management system, as well as standards and pre-established dogmas. Add on to that, skepticism from an administrative perspective about changes.

Ilton outlined how we are now entering a new era of collaborative consumption in our lives, both privately and professionally. For example, in Rio de Janeiro the orange bikes, which have stations all over town allowing a user to rent and share a bike via an app. Society in general calls for resource utilization optimization, whether for economic, environmental, social or other reasons. Other parallel examples exist globally, so why not apply this concept in the Brazilian offshore industry?

Shared resource management is a reality for IOCs in others regions. And it's a process that's constantly evolving, for Petrobras too. Using resources that are already contracted, Petrobras uses PB-LOG to integrate services and meet the demand of customers internally and externally.

To do this, PB-LOG focuses of resource usage, not availability. This in itself is an important paradigm shift. Focusing on the use, the actual price of the service will depend on the level of competitiveness, the scope of service itself, the integration of resources. This will be in opposition to the classical model, where each feature is examined individually and on the basis of average market demand and supply. By making it economically viable, integrated services should meet the oil company's standards. Not only standardization within each company, but standardization between companies. Indeed it may be time to think about the easing of standards. In the words of Ilton "I'm not afraid to say that Petrobras' standards are around 80% to 90% of the standards of other international oil companies, so our discussion should be focused on how Petrobras and other companies could be flexible or adjust the standards in the remaining 20% or 10%, and not be each wanting to impose own interests." This is, in fact, the key of success to share resources. The industry needs to put its engineers, managers, economists, lawyers to work on cost optimization and creative ideas, as opposed to the direction of defense of a particular pattern, probably developed in the last century. Westshore, as independent brokers, has the vision that as the Brazilian market matures, initiatives such as the creation of PB-LOG will become a common and essential solution.





by Wilson Nobre

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he elaboration of the Individual Emergency Plan (PEI) is motivated by the guidelines proposed in Conama Resolution 398 which requires the structuring of a plan to deal with incidents involving oil pollution in waters under National jurisdiction. Generally the plan is based on the definition of an oil spill scenario and simulation of the dispersion of the oil in the water in function of current and wind, and its impacts to the environment in order to determinate tactics and techniques of emergency action. The PEI also defines human and material resources for intervention, organization and flow of communication, recovery measures for the affected areas, team training policies and the management and updating mechanisms of the plan in

In regard to Oil companies in drilling and/ or production campaigns, the Resolution says it is mandatory to have oil spill recovery vessels exclusively dedicated to the company's campaign, which means that the vessel can't be shared with any other company if needed. Looking for improvement and good sense, the case of Petrobras is highlighted. The company allocates its resources over its various fields (with different partnerships and thus ownership) according to their sharing capacities. The Legislation sees Petrobras as only one company and doesn't take into consideration that Petrobras has its different partnerships. The question is then: why not allow the same principle to have operators share resources in fields in proximity? The legislation has been interpreted by the most radical of its aspects, and the conclusion is that Brazil has by average world's highest number of oil spill emergency vessels and equipment. Macondo has shown humanity that recovering the spilled oil is not the most efficient of the strategies, and moreover brings an environmental threat: if the objective is that the oil does not reach sensible areas onshore, what kind of mentality is behind having a huge fleet of recovery ships to do exactly that: bring the oil to shore? Doesn't make much sense.

It is in this sense that IBP through its HSSE Steering Committee and the presence of the oil companies have been promoting discussions and a joint proposal to IBAMA where a more streamlined response methodology is set for our local industry.

There is a general perception that the industry and authorities could not be more distant however. The pace of the discussions and the time needed to implement changes is far from ideal. In the meantime, some evolution has been seen, where hands-free boom systems and other modern technology has been allowed to be incorporated.