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RISKY ROUTES: ENERGY TRANSIT IN THE MIDDLE EAST

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P R O C E E D I N G S

MR. BARAKAT: Okay. Okay, good evening everyone. Can you hear me? My name is Sultan Barakat and I'm the director of research at the Brookings Doha Center. This evening's event is part of a series of events that we've been putting specifically on energy. Those of you who have been following our work at The Brookings -- one important [teller 01:22] of our research work is energy, is [account 01:25], but also [inaudible 01:26]. And usually we hold an international energy forum in Doha. And for the last -- from this year onward, we changed the strategy. Instead of having it annually, we have the energy forum every other year and in between, we designed another shorter events with more select audience. People who come quite interested in specific aspects of the energy research agenda. So, this year -- every year we have an event on the drop in the oil prices and its effects on the Gulf states specifically. We had another event that looked at the [LNG 02:04] and the relationship between Qatar and ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

the United States and so.

Today's event is focused on the transit of oil and gas and the risks associated with that aspect of the energy agenda. It's something that has always been of concern to people in the region, but also to other consumers in Europe, the United States, in India, China and elsewhere. Partly because of the geography of the region and where the oil is being extracted from and the various checkpoints that it has to pass through and partly because of the change in the critical landscape around. We live in a very uncertain times. Lots of phenOmanons are kind of playing to energy and affecting the degree [inaudible 02:55] associated with the transit and the transport of oil and gas.

For example, we have on the -- on the rise [inaudible 03:03] more and more [inaudible 03:07] up for states -- more from non-state access [inaudible 03:16] at this time from Syria and so on. Some of those states have more crowded areas. Some have good supplies and of course, we continue to live under the ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

shadow of a potential Iranian-Gulf confrontation of some sort and that is very much on the mind of our policymakers all the time. And we also have the -we also have the initial piracy from prison, so [inaudible 03:50]. And after the complications followed this, we had basically the drops in oil prices making the transfer of crude even more [inaudible 04:04]. So, we hear about some shipments taking a longer route maybe around Africa without much of the pirates [inaudible 04:18].

So, a lot of interesting things are happening at the same time. All likely to affect the price and the -- with it the goal that's [inaudible 04:34] by our region [inaudible 04:37] and to help us understand what is going on we, have published a paper [inaudible 04:45] done by my [inaudible 04:50] which is a type of [inaudible 04:53] and part of the preface [inaudible 04:58] we launch it in part, so I hope you collected it [inaudible 05:05]. This very good paper and it is in both English and Arabic. [Both sides 05:121. To -- so what we had planned for today, we ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

have about 90 minutes. The first 15 minutes, I'm going to give to Robin to talk through the paper itself and some of his [inaudible 05:28] findings. And then we will engage the [inaudible 05:31], so for about a half hour or so between myself and the two speakers.

Then, after that, I will open it for the audience to get your own input and questions. We have -- usually, we have our events, as you know, broadcast on Al Jazeera, but today to allow slightly more free, don't know about free, but more relaxed [inaudible 06:00] things [audio gap 06:02] we are recording this [inaudible 06:07] only done, but the [audio gap 06:11] we're broadcasting it on our website [inaudible 06:18] so speakers and the audience should be relatively free [laughs] to express substantive issues that are involved in this [audio gap 06:29].

Let me just start by giving a very brief background about our two guests tonight. Robin Mills, sitting on the far left, is a un-resident fellow for energy at The Brookings Doha Center. He ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

has recently established common energy in 2015, which aims to meet the need for regionally based Middle East energy and [sides 07:00] of investment. He's an expert on energy and has been around this region for quite a long time. He has been described by foreign policy as one of the energy -- of the energy world's great month and you'll see in a few minutes why that is the case. He has worked with consultants, with many groups, including Shell and also worked for some major businesses and business developments in [Micro Emirates 07:26] outside Iraq and so on.

But he's really better known for being associated with us at The Brookings Doha Center and we're very happy and honored to have him with us. And this is not the first that he has produced and I hope it's not going to be the last in the coming year or so. He's a -- he's a -- he's a commentator in the news on a regular basis. He has a weekly column at the National newspaper, [Natobe 07:53], but also, comments frequently in various other outlets including the [Vigusee 07:57], Al Jazeera, [inaudible 08:00]. ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7190

Our second guest is Colonel Giuseppe Morabito, or as I would say, Morabit --

MR. MORABITO: Morabitune [phonetic 08:09].

BARAKAT: Morabitune, but we will MR. Arabize. I think you must have some Arab blood in Giuseppe is the director of the Nature of the name. Middle East Faculty at the NATO Defense College. He previously commanded surgeon's school of the Italian Army in 2003 and participated in the joint forces operation in Bosnia Herzegovina as deputy chief of staff for operations between January and October 2004. Colonel Morabito spent most of his operational career in the Italian Light Infantry serving as platoon commander and then, as company commander. He then moved to the Italian Army General Staff College in Rome as staff officer in the International Training And between 1998 and 1999, he commanded the Branch. 17th Infantry Regimen. After which he served as the chief of staff in the Guarantere [crosstalk 09:16] -not too bad. He's now chief of staff of the NATO Headquarters -- was also the chief of staff of NATO's ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

Headquarters in Albania in 2000 and 2002. He has also collaborated quite widely with various universities in terms of research. And in fact, we were very honored to have him here this time almost last year --

MR. MORABITO: [Crosstalk 09:47].

MR. BARAKAT: -- had a session on NATO's role in Afghanistan. He's with here, both representing NATO and -- or representing himself depending on the question. [Laughs 09:59] And he will explain then, I can take out the [inaudible 10:05]. You decide, okay? So, depending on the question, he'll be representing himself or NATO. And as I said, this is not going to be broadcast live and it's definitely not going to be on camera.

So, with this introduction, I would like to invite Robin to start by giving us an overview of the risks that exist within the region in terms of oil and gas transit. And in particular, if there is any particular distinction between oil and gas and if some is more vulnerable than other. Robin? ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

MR. MILLS: Right, thank you so, Sultan. Thanks to everybody for coming out this evening. Now, we're approaching summer and summer it's great to have such a good turnout here as we get into a quieter period of the year. But, of course, for energy security and security generally, summer in this region is often not a quiet period and some of the most dramatic and dangerous events in this region have taken place in summer.

And that, I think for me, establishes a kind of paradox we have in the oil and gas markets today, in that, we're in a period of great, unusually low prices for oil and for gas. And we know the challenge this is bringing for the region, but we're also in a period which there are pretty much unprecedented threats to energy security. In a number of places in the world, but particularly, in the Middle East and [inaudible 11:31]. And this is during a time when OPEC [specacities 11:35] it's -- is really pretty much a record low levels with a period of which so is a very high level of supply disruption, ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

particularly in oil. [Inaudible 11:46] gas, but oil there is a globally high level of disruption.

Some of that is in areas outside the region, such as Nigeria, Venezuela and so on, but a lot of that disruption is within the Middle East, North Africa region. And when yet, the oil markets and the gas markets are relatively relaxed about this and there some features of the market, I think, which have made the market relax. And maybe the market is right to be relaxed for now, but we can see these as longrunning threats and some of the threats in this region are threats that have already existed and may exist for many years yet.

And so, although we may be in a period of oversupply in the oil market today, we may be in a period of abundant supplies, we may have very high stocks globally. So indeed, maybe there isn't a huge threat to the market immediately from these disruptions, but we can easily imagine that the market could tighten significantly over the next few years and so making the market much more vulnerable. And ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

there are some threats in the oil and particularly, in the gas supply picture which are not very easy to mitigate. And we'll talk later, I think, as we get on to discuss this topic about mitigation and about some of the options that we can use to tackle energy security threats. But I think it's fair to say that there are some threats even in the current market, which would be very significant -- which would have a very severe effect on global oil supplies, on customers, on, of course, oil exporters themselves and on the global oil market.

So, let's think about some of these threats and what I -- one thing I've tried to do in the paper is to provide something, kind of hierarchy of threats to oil and gas security. And I mentioned we're at a time of unusually high risks in this region and some of these risks have actually turned into real threats and real disruptions of oil and gas supplies. And so [Tar 13:43] mentioned the issues of state breakdown, the role of non-state actors, sometimes violent and extremist non-state actors. Sometimes separatists ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

state actors trying to take control of natural resources for their own benefit or possibly blocking the transit of natural resources.

And this gives rise to threats [something] 14:03] at all levels. You have at the very local level, right up to major interstate conflicts. So, at the very local level, you have acts of sabotage; you have communities who are maybe demanding a greater share of natural resources in their area and who will block a pipeline or an export terminal. You have acts of piracy, of course, which you've seen in recent years of Somalia, in particular, and perhaps that could happen elsewhere. Somewhat above that, you have more long-lived and more widespread campaigns wages by armed extremist groups and we're obviously getting pretty familiar with that. You know, sadly familiar with that in Western Iraq and Syria and also in Libya and Yemen, some major hotspots in the region.

And some of these areas, Libya, of course, is a very important oil producer, or certainly was prior to its revolution and could be again. Iraq, of ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

course, is a very important oil producer though the current violence is largely away from oil producing areas. Syria and Yemen were less important oil producers, but they were still oil producers and exporters. Yemen is -- was and also is quite an important liquefied gas exporter, which has been entirely halted by the [weather 15:22] and instability in Yemen.

So, you have a kind of regional discovery on a national scale. You have great downs of security which make it impossible to continue oil and gas production or impossible to continue on in gas transit. And then, you have the very large and very extreme scale that thankfully, you haven't seen yet and hopefully you won't see, but there is always, of course, the possibility of a major interstate conflict involving two or more states and possibly also, then drawing in reactors right outside the region. And this is, again, it's not a unique occurrence to the I've been in a number of interstate wars region. over the past decades there. A couple of them, which ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

have had very significant impacts on energy security.

The 1973 war between Israel and Egypt and Syria, of course, didn't affect oil and gas supplies directly, but it did lead to the embargo by Arab nations on oil supplies to the U.S. and that triggered the first oil crisis. A very major rise in oil prices around the world and a series of geopolitical consequences, which have unfolded from then And the Iran-Iraq war in the 1980s, which on. definitely did, of course, involve two major oil and gas suppliers and in which there was severe damage to the oil production or facilities of both and there was a significant phase in that war, the tanker war in which there were a large number of attacks on oil and gas installations in the Gulf and on tankers, on shipping that eventually led to the intervention of the U.S. and USSR to protecting shipping through the Gulf.

And this is probably one of the classic cases that people think about when they think about energy security in this region. There's always this ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

fear that the Strait of Formosa [phonetic 17:14], the Gulf would be closed to shipping and this would prevent oil and gas exports entirely. And this is one of these broader class of choke points which people like to address points which control oil and gas transit around the world. So, [inaudible 17:27] is clearly one of the most important ones. [Hordomores 17:29] carries typically about 17 million barrels per day of oil exports.

So that's out of about 90 million, 92 million barrels per day of oil of production worldwide. So, you can see we're talking about 20% plus of global oil supplies and something like a third of globally traded oil. So, obviously, the loss of that supply would be catastrophic for the world economy. Also, what you don't here address so much about old news, but it's also the sole route for the export of LNG from Cutta, liquefied natural gas which is an absolutely essential source of energy for East Asia from Japan, Korea, Taiwan in particular, but also important for Europe and other LNG importers. And ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

there's also LNG exports for Abu Dhabi, not as much, but also adding to that as well. That is half the (inaudible).

So, for the oil supplies and we're talk about this a bit later. They also (home use). There are some bypassing routes. There are some ways you can avoid (home use) to an extent, but for liquefied gas, there is no way around and the loss of that, again, would be catastrophic for economies that are dependent on it. There are other trade points in this region. Djibouti, the southern entrance to the Red Sea and the Suez Canal, of course, at the northern end, also very important routes for trade, in general. But, indeed, also for one, gas supply, less so to an extent and less so, now that Europe is not importing as much Middle Eastern oil, in particular, as it used to, but that's still important.

And then the Bosphorus Straits in Turkey providing the entrance or exit from the Black Sea, which is an important route for Russian oil and Caspian oil, in particular coming out of the Black ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

Sea. Now, you may think Turkey's a stable country, that the Balestra is less under threat, you know, probably true. But it is another point of concern. Then, you have broader transit routes, which are maybe not focused on single choke points, but nevertheless, is honorable to its diction. For example, the routes supplying oil and gas pipelines through (inaudible), through Georgia into Turkey. You have gas pipelines to be constructed through southern Pakistan, Balochistan, which is an area of just say, long running insurgencies. Any of a number of other major oil and gas pipelines. Cyanide, which is seen in Egypt, which you've seen repeated attacks on gas exports from Egypt, which have ceased entirely. Not just because of sabotage, but that latter certainly hasn't helped.

So, there are other routes -- other pipeline routes which can be maybe replaced in the moment (inaudible) be replaced in the short-term. So, when we think about these risks, you have this real contrast of things that can be done in the long-term. ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

You might be fairly relaxed about it. It's a whole new side of the long-term and you say, "Well, you can build pipelines to bypass it," but any blockade in the short-term and short-term can be anything from months up to one or two years, there's very little that can be done in terms of finding any alternative route.

And finally, I think when we think about the issue of state breakdown or loss of state capacity in the region, there's a broader and a more diffuse, more subtle threat to energy security, which is really to do with investment. In an area or country with kind of a moderate level of insecurity of violence, people say, I think the international oil and gas industry can't still operate at a somewhat higher cost. We'll find a way to deal with this insecurity. The oil industries operate in Nigeria under quite difficult conditions for many years or oil companies operating in southern Iraq and the heavy security, but they find a way to operate exceptively.

But at some point, insecurity becomes so severe that it severely deters investment or perhaps ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

prevents it entirely. And so, in the longest term, this is a threat to developing promising, new sources of oil and gas around the world and including this region in particular. And you can imagine, of course, that even with some improvement in security, it will be very hard for international energy companies to go back into Libya, for example, to begin operations immediately. Pipeline routes across Afghanistan have been discussed for a long time. I mean, again, insecurity is a threat to those and so, there's this longer term impact in deterring investment, to making investment more difficult and restricting the investment (inaudible) on a smaller group of companies.

So, then that was my view on the energy security, some of the key energy security threats. Of course, you can then drill down in the military sense, in a more detailed security sense as I hope the colonel will be able to on what exactly the military response would be and how serious are these threats. Would there really be -- would there be an easier ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

security response us? And outside my field of expertise, but I've tried to highlight some of the key issues, some of the key vulnerabilities. And I think as we to on with this discussion, later on, on we'll then also be able to talk about some of the possible solutions to these problems.

MR. BARAKAT: Great, thank you so much. We've always been hearing about the (inaudible) vulnerability as a straight, but has there actually been an incident when the supplies were stopped or interrupted ever?

MR. MILLS: Well, this is very, you know, I think a very key point. A lot of analysis of energy security in the region folks (inaudible) because it looks on the map like such a narrow, little waterway and yet, obviously carries so much oil and gas. So, it looks very vulnerable. Now, in terms of real blockades, it's actually -- it's not like the Suez Canal obviously. It is just 50 miles wide. So, it's not something that you can block physically by sinking a tanker in it or something. Obviously, you ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

know, it can be blocked by mines, by missile attacks and so on, or at least it can be made so difficult to get through it that the commercial ship owners wouldn't be willing to take the risk.

Now, we've never seen a complete blockade of Hormuz, not to say that it couldn't happen and of course, certain regional neighbors repeatedly make threats to block Hormuzm, which they never carry out, or haven't done yet. But if you look at the Iran-Iraq war, of course, yeah, there was not a block of Hormuz, but there were literally hundreds of attacks on shipping and significant numbers of ships, including tankers where sunk or put out of action.

Shipping through the Gulf continued, you know, at a lower level, but, of course, you could say, well, that was fine. I mean, oil and gas trade continued, but at a very high cost. There was significant military involvement, as I say, from the USA and the USSR. There were obviously huge losses in terms of the destruction of ships and loss of life. So, you know, although that wasn't catastrophic for ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

the world economy, it was certainly not an outcome that we want to repeat.

MODERATOR: Thank you so much. Giuseppe, from a hard security point of view, I assume that NATO has analysis -- its own analysis about the security of the routes, particularly with many NATO member countries being dependent on supplies from this part of the world. Could you just share with us that security perspective and what would it take for NATO to intervene in the region to secure certain routes?

MR. MORABITO: Okay. First of all, thanks for coming, for inviting me and sorry for my English. It's not mother tongue. I have a terrible Italian Roma slang, so sorry for that. I'll try to keep you awake. NATO is interested because all the 28 mission are interested in their future. All the cities of the 28 nations have to live in their future, so we're very interested in the future. And the energy supply is the future of this region and the future of the economy of the over 28 nations, plus, we can consider two or three out of this business. So, when I'm ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

speaking of your future and my future, as Italian, because you and me, we have to live the rest of our life in our future.

And the future of this area is the freedom of movement of the gas and oil. If, without the freedom, the future will be very bad, we can agree on that at least. The 28 nations -- what is important to say NATO is not the gas as it's interested, but we are interested in what is happening here because is out of interest for us because if the supply of gas is stopped, there is a problem in the economy in all the NATO nations plus, we can consider only out of this business normally because we have U.K. because of shale gas, but all the other nations have a problem. And if we consider a stop of support, or energy support from this area, it's very difficult to think in the future, but the NATO cannot regard Mr. Putin asking to have more gas from (inaudible). It's very difficult. All this possible, but it's very difficult.

> So, from this point of view, you know better ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

than me based on the history of NATO is run by Evans (phonetic), but Evans changed the story of NATO. Something happened and then the change -- the policy -- the political leaders joined, changed the policy and take a decisions, but Evans, they changed the history of NATO. And Evans they changed where we have to live. So, coming back to energy, it's very important that in the near future, the movement of gas and oil keep to be free and to reach the Arab consumer. (Inaudible) may they run at sea, but not to Europe.

Today, sorry for that, but I have to come. Today, the first piece of it, I arrived from Rome, wondrous weather. A little bit hot here for me. I jump in the car, terrible air condition and I don't use air conditioner, I use newspaper. Have you seen this newspaper this morning?

SPEAKER: (Inaudible)

MR. MORABITO: Okay, this article, what does it mean, this article? That the cost of the gas for Qatar don't change. You agree? I'm not very true with this newspaper. I don't take one penny --ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

penny's (inaudible), you know. I don't take one penny from him. So, what is the point? Even if the cost of the gas don't rise, most probably more will go around Africa. Why? Because of the -- he is happy because it's Brits. Lloyd's, it's Brits, so for sure, you say, you no risk. But imagine you close all routes or there's a problem in Suez, but one that is very happy is the president of Lloyd's because immediately, the cost of interest for the ship's rise. Silence -- never considered that. The Brits are very happy, but only Mr. Lloyds, and not all there.

All of that and this is very important, you It's very happy, Mr. Putin. Don't forget know. the NATO (inaudible) too. There are two souls for NATO. I belong to the one that believe that it's most important, the south flank. But there are some nations that live a -- have a nightmare, the nightmare of Russia. No European citizen was killed from the Russian for the last five years or no NATO citizen was killed of Russia. Probably some -- more of them were killed from people coming from the south ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

flank. Just a little bit of difference. But anyway, there are some nations, they are very nervous because of Putin. But Putin has a terrible eye -- I don't know if you know if you haven't had the eyebrow (phonetic) war. Have you heard of this war in the past?

The tool of gas is very important. The gas from Russia is no cost. Russia and I've been able to say, a stable country. I don't see in the future, the next five years any problem or revolution or any attack on Russia. The government will be stable. Probably the south, the way I see, the situation is not the same. I was speaking with Robin before, onethird of the cost -- in one-third of the cost with middle Iran, when you land with your ship, you can reach a mosque in a few minutes. No, half, 50%. In one-third, if you land there, you speak Arabic. Consider this, but these are also the most stable areas of the south of the middle Iran, but the movement of energy has to pass through that. Ιf there is a problem, there is only one way. Go around ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

Africa and this is a big problem because the costs of the gas in Qatar will never rise. No, or more, we have to reduce again to a low to be market because the shale gas exist and the Russia exists.

So, coming back to NATO -- NATO in this moment, if nothing happen, has a very low interest in the security of energy because there harder problems. There are two names: DASH -- DASH as you (inaudible) is called DASH -- DASH --

MODERATOR: It depends on --

MR. MORABITO: It depend -- is my Roma slang and Putin. If you ask them t have the security of energy, it's very difficult. In a few -- in a few weeks, I will be an ambassador, a summit of NATO. I don't think that when we spend more than five minutes -- with they in discussion speaking of security of energy. This is a reality -- a reality because in some way the energy is arriving. And -- remember what I told you at the beginning, (Evans) -- if Evans happens, probably they will consider the problem.

> But let me take you to task on the events ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

business because, you know, I did all days when there used to be a war in Lebanon. The oil price will go up. Now, we have a war that involves Saudi Arabia. The largest producer, you know, controls the price, et cetera and Yemen is a producer of oil and gas and it doesn't seem to affect the market. Because there is a -- I have an answer -- only one word, shale. Shale gas, in the near future, the United States (inaudible), it will be the first producer of gas in the world.

MODERATOR: But it hasn't driven NATO to react in any way.

MR. MORABITO: No, because we are not --MODERATOR: It's not the of the supply.

MR. MORABITO: We're not affected. We are not affected and don't forget with NATO, it's half of a (inaudible) to NATO come from the states, so which is also important to consider. In any case, I don't want to say this -- this moment is no different. It may look -- during the war of the operations going this way, the operation in Libya. It was a complete ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

stop of movement of gas and oil for Libya, but was compensated. Okay, now, I can do a joker because I -- Libya choose wild a little bit. The Italians eat pasta, but to cook pasta, all the Italian ladies use gas. Gas -- we don't have electricity in Italy, we use gas. So, Sicily -- I don't know if you know my country, Sicily to Florence, but is not a beautiful -bad city, we use the gas for one (inaudible). More than with Germany to Florence, we use the gas from France -- from Russia, so there is a way, but we have gas in any case, but the pipeline are interconnected. So, when we had the -- if we had any problem with Russia, probably Algeria can send more gas to us. And the same is happening in Spain. So, all European nations have a plan. Seven or eight times per year, a big ship from Qatar arrive in Italy. And they give gas to us to cook our pasta.

But this is important, here's why this is important. Imagine I have to tell an Italian lady no pasta today, no pizza. To keep attention rise, you know, and is the same if you go in Germany and you ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

don't have electricity to produce beer. I don't speak of food with U.K. because it's another case (laughter), but doesn't matter. But okay. This is important that you know. I like to choose mine, but you comes to stay in your mind. The level of the life in our country is more important than all the other problems. But it's a nightmare to have to reduce our level of life in the NATO countries, the NATO countries.

And if gas is become inactive there, we left. If gas is not a problem or the main (inaudible) because the price is stable, it's okay. And now, the shale gas and we're starting -- at the NATO defense, we call it to discuss with shale gas in 2012. The shale gas is a leverage, but the American have to keep the price low for sure for this NATO businesses. First of all -- thank you.

MODERATOR: And amazing, just the point that you make about infrastructure. How you can use it to reduce risk or mitigate risks a little bit so that if you have less supplies from one part of the world, ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190 somewhere can pump its gas into that. Now, that is a mechanism available for consumers, but for suppliers and you in your area of presentation, Robin, raised the point that Qatar, for example, is a hundred percent dependent now that it is doing LNG only on Hormuz. So, there's only one route. What are other strategies to mitigate risk aside from infrastructure, the physical route to find? What else do states put into place to try and reduce the risks of disturbance?

MR. MILLS: Yeah, I think this is a very important point and I try to express in the paper kind of three big areas of techniques that people have used to reduce its vulnerabilities and I think, you know, the Colonel's point about Europe and the interconnections is a great one. You know, European gas (inaudible) in the interconnections have improved a lot over the past few years and lay, particularly in Eastern Europe, are a lot less vulnerable to say any interruption from suppliers from Russia. And, you know, when I think about the old Italian lady cooking the pasta, that's one problem, but you know, a few ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

years ago, we had Bulgaria, which is a hundred percent dependent on Russian gas and another Eastern European countries having no gas in the middle of winter and it's not about pasta, but it's about the house freezing and it's about human life.

So, that risk has been greatly reduced. But that was done within the framework of an institution, the European Union, which realized that this is a real critical vulnerability and took a lot of action and made money available to create into connections and reduce that vulnerability. So, you know, when you think about oil and gas exports from the region, how they're threatened, people will focus on infrastructure -- new infrastructure and that's important. So, there's things like pipelines that bypass Hormuz and they give alternative export routes and strategic storage of, to some extent for gas, but particularly strategic storage in oil, which could be held in the region or it could be held by the consuming country and, of course, consuming countries -- if you take Europe, the US, China now, they do hold ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

a lot of oil in storage as well to protect against these kind of disruptions.

So, you know, that infrastructure is an important part, but that only goes so far and I think one of the points I try to make is the infrastructure has to be in the middle of an institution and it's much more effective when it is. So, for example, if you have a disruption of Hormuz, Saudi Arabia has a bypass pipeline which goes to the Red Sea. Saudi Arabia could send most of its oil exports through that to the Red Sea and its exports would only be reduced by a couple of billion barrels per day. And the sound is probably far more gain on the increase in price to know (inaudible) lose on having their exports reduced a bit.

But, of course, its outcome would be catastrophic for oil imports, but also for these oil exporters who depend on Hormuz entirely, which is very Kuwait and Qatar particularly and also, into a (inaudible) Iraq, as well. And also Iran. All of these countries have almost no other way of getting ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

their oil out. The UAE from -- from Abu Dhabi has created a pipeline that goes from Abu Dhabi through -across to the Indian Ocean coast. So, the UAE does not depend on Hormuz. So, that's a piece of infrastructure which gives the UAE security.

Now, but if you think about it from a (Saudi) point of view, Saudis, if they want if Hormuz is interrupted, well, whenever the price will go up, we will gain. We'll lose with exports, but that's fine. That will be more than replaced by increased price. So and then, you know, if Kuwait is suffering, well, that's just too bad. But, of course, Saudi Arabia sits within the GCC and from a GCC point of view, this would be disastrous. So, for the GCC, for example, to work together on infrastructure, it would give a gain to all that member security.

And when you think about the use of that kind of infrastructure, it's also, I think a way of protecting yourself, even if Hormuz is never blocked, just the fact of having that spare infrastructure, ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

gives you the confidence that if anybody threatens you, it's an empty threat because you have alternatives and for investors or outside customers' point of view. Again, I have confidence in you because I know if one of these interruptions to one supply routes, there are other supply routes that can be used instead. So, that gives a much broader benefit than simply constructing a piece of metal on the ground.

And this is very important also when you think about consuming nations with -- and again, we've seen this in the past when there is an interruption, everybody scrambles for supplies that are in short Countries will put on import -- export bands supply. and they'll say, "Any oil we're importing, kind of exported again," and then, of course, countries that are going short because everybody is competing for these limited supplies. Whereas, if you have clear rules and procedures and organizations that will say, "Well, here's -- if there is interruption, here's the set of rules we're going to follow. You'll have no ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190
way of allocating the gas supplies amongst everybody who needs it and then you don't get a panic and the impact of any disruption is much less." And you'll often see if there are oil crises or shortages, the real damage is done by the panic, not by the shortage itself. That's short of what we saw in the '70s.

Now, the international energy agency is one very important body for this and that was setup in the '70s following the first oil crisis exactly to, amongst other things to coordinate emergency response. And that the IA, although in many ways has been very successful, doesn't include now, the big consuming nations, the new emerging markets. It doesn't include India. It doesn't include China, particularly and it also doesn't include the producing So, it doesn't include Middle East countries. producers. It doesn't include Russia. It doesn't include Brazil. So, the IA's kind of limited and it what I was trying to do in the paper, I don't really have an answer to this, but I was trying to explore what kinds of institutions are there should this ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

energy security aspect be taken up by the GCC, yeah, it probably should. But, of course, the GCC is only part of the Middle East and there are other important Middle East producers.

Should it be taken up by OPEC? OPEC probably has a role, but, of course, includes other countries like, Nigeria and Venezuela, whose concerns are very different from those in the Middle East. Should it be done by interagency cooperation between say, GCC or OPEC and the IA. I mean, there is a forum between the IA and OPEC, but I mean, whatever it is, there's this clearly need for some kind of better coordination on these issues.

And then, the issue of markets, again, I think that when there's a crisis, there's a temptation for government to try and step in and control the market. You know, yes, there is a role for government in calming panics and obviously, very much a role for governments on the security side. But again, you see a lot of the damage in energy supply and shortages have been done when the market wasn't ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

allowed to work. When there were price caps, when there was rationing and that's the more -- often more done more damage. So, having markets sort of function effectively and be a bit resilient under stress is very important and part of this is good information. So the quality of oil and gas information has improved a lot over the past two years, but it's still quite a long ways short of what we need.

We don't have a very good picture on strategic stocks in China, for example, or even on real Chinese demand. We don't, as I say, have regular picture on true producing capacity in southern Asia OPEC countries. So some of the data again, gets market confidences if cope with supply shock, or if there is -- if the market can't cope and at least we know that in advance and can do something about it. So, really, these are sensitive or all have to be used together. So, in infrastructure pipeline storage has to be built by institutions, has to have clear rules how it's going to be used. And a single country can ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

build infrastructure on its own, but generally, the big benefit of the infrastructure comes with its multi-national and, for example, if your Kuwait and you want to avoid Hormuz, well, you know, within Kuwaiti territory, there's no way to do that. You have to be working together with neighbors. And Qatar is in a similar position to that as well.

So, that means, again, you need regional -some kind of regional cooperation to allow that to happen. So, this is some of the issues we face with mitigation. I think you also can say some risks can't be mitigated or can't really be mitigated in an acceptable cost. The infrastructure required may be too expensive or is not practical. The market has to accept that and deal with it in other ways by diversifying supplies, by insurance, by whatever other techniques are available. So, it's important again, to do a cost benefit analysis of all of these different possible methods and see which one seems most attractive.

> MODERATOR: It's amazing to think that even ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

when the prices were so high, there hasn't been that level of investment in creating an alternative route for export in this region. From what you say, it sounds like there is no common agenda, (government) agenda to look into the risks and then try and work around it, which I find it surprising. It's not my area, but given their total dependence on oil and gas and the income that's generated from it, you'd think this has already been thought through and implemented. Particularly, that -- and in some cases, like in the case of Yemen, if you have an alternative pipeline that goes through Yemen straight to the sea, it will also be an uplift to the development of Yemen. Ιt will provide additional resources, great jobs, et cetera, et cetera.

So it could be both reducing risks, but also investment more in the development and seems to be very short-sighted that we're not doing all this and we're just relying on providing hard security or the threat of hard security by inviting, you know, friends to come and take basis in the region, to trying and ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

stabilize it. But I want to move on to the issue of diplomacy. To what extent do you think diplomacy can play a role in this? And I'm now looking at -- trying to reflect on the way Qatar conducts its own affairs. I mean, maybe now, I'm thinking if it's being so reliant on one access point, or exit point.

They have no alternative but to follow a balanced relationship with Iran to try and have a softer line than other neighbors towards Iran and so on. Is diplomacy an important component to this? Do people sit and talk about this? States trying to produce the risk maybe behind closed doors?

MR. MILLS: Well, I think the diplomacy is important. We have a number of severe regional conflicts as we know, right, of which, the Syria-Iran conflict, Yemen, Libya, the most serious. So, they all affect energy security. Now, solving those conflicts, I think would be a great thing for many, many reasons. Energy security is not the most important reason to try and bring those conflicts to an end, but it is an important one. So, yes, yes, ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

there is a role for diplomacy in supporting energy security in that sense.

I mean, on the GCC, I think the GCC is a common natural forum for this. The GCC together couldn't solve all of the Middle East energy security problems, but they could certainly make themselves much more resilient. And there have been some discussions, I mean, Hormuz, of course, being on the Indian Ocean is a useful way out. Now, Hormuz has had discussions with (inaudible) with the Kuwaitis over this. But I mean, you'd need at least also the Saudis to be part of that as well, which is why the realities of geography. So there have been discussions, but not led to anything really tangible yet.

But I think this questions with you think about Qatar's position, then it's often been said and, of course, Qatar's greatest asset, the North Field, the gas field which is shared with Iran, of course, goes into Iranian waters. It's often been said that the fact that both countries are developing that -- I ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

mean, not cooperative, kind of competitively, but they share the same resource, obviously, Qatar has to be careful in how they deal with Tehran. I mean, I think that's well understood. That's perhaps, one of the most obvious examples of that dynamic. I think we're the ones in the rear are a little more subtle. But no, I think energy security doesn't get the attention it deserves and I think, as the Colonel addressed earlier, in NATO meetings, if five minutes are devoted to energy security, that's already a loss.

You know, and that's probably often true in this region unless you're talking about a specific threat, a specific bombing of a pipeline or some real incident. But as energy security is a concept, no, I don't think it gets enough attention.

MODERATOR: Interesting.

MR. MORABITO: If I moved on, on this point, it's very important. You are right. I want to ask you to focus on what is said five minutes because remember (rare) events. NATO can be -- NATO has advantage is in arena of this (inaudible). ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

Twenty-eight can take a lot of cooperation. I see I can't really rely on undeveloped country, so at least for this issue, this -- let's call it problem. For this problem, we it's possible to think of a nation because the nations that are affected from the problem asked me to be in arena and not aware if we can discuss because of the cooperation. It's very important.

Then, when you tell -- probably we discuss before we come about it, one idea -- is my personal idea, so (inaudible) idea personally. Coming back what you said with Kuwait and Qatar are the two nations to count as more affected from Hormuz and why there should be, but Qatar organize here a center of excellency. A set of (inaudible) on the traffic control of a set of control. So, why not Qatar having the idea to be the nation that organizes center of study or school, where all the people in Vienna start to discuss the traffic control all the threat in the area.

In (inaudible) when I was taking this -ANDERSON COURT REPORTING
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sorry, if I look at my paper, what the name is terrible of these organization. In the NATO, there is a Center of Excellence, but the name is NATO Maritime Interdiction Operational Training Center, is English. In (inaudible) eyes in Qatar, in Doha, ICIC Maritime Interdiction Operational Training Center. When all the nation in (Hodba) for the security of the gas for all the country there and who has to be the main actor? (Inaudible) as you told us had more problem. This is an idea.

So, when you have an area that fall on the (inaudible) where you can discuss every common training, make exercise of (inaudible) of the problem. Probably you give the famous word, a softer (inaudible) to the other to create the problem. Ιf you do something showing that you are ready to react, that you have a plan, when you started the problem --I not want to sell the product because I'm in (inaudible), I'm not dead yet, so this is very important. So, you have -- when you have the problem, you create what is in the NATO that's working ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

for the difference. Don't do anything against us because we are ready to react.

In fact, to (inaudible) is very important because if you beat the system that cannot be affected from the first attack because I have to be honest, this is my worst scenario -- if one nation or one alliance create a problem in (inaudible), not create any problem enormous and that's it. Probably, it's a combination of that action to create the problem, the economy of the other side of the Gulf. Don't think, hey, come back from the Gulf. If I block Hormuz, it's only the first section of a maneuver. It's not only a fact, per se, as we say in Latin. It's a first step of something, it will happen. So, that deference is very important. Having a -- showing that you are ready to solve the problem is very important.

Show me that you have a better plan is very important. And we are in the right nation because for geographical position, for budget capacity can create this. It's a first role opinion. NATO is ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

working. It's creating a lot of central excellence in -- where they're showing the potential enemy or potential adversaries that they are able to solve the problems. We have a cyber attack, we have cyber center where we study how to solve the problem against several attacks. Now, we have a team of people that move in the nation where we have a cyber attack, moving from this center.

We have a (Valentine) Center, if something happens, these people in Greece have a greater knowhow. So, why not here? And don't tell me you have a budget problem. Probably the Greek have more budget problem than Qatar or Kuwait. Sorry, for the Greeks, but this is real. This is -- just when you told me you speak of diplomacy, diplomacy is important. But some very strong action are very important. Thank you.

MODERATOR: Let me ask about Iran. Robin, Iran has been coming back into the market. Are they still investing in the vulnerable homes area, or are they now looking to export from elsewhere? And the ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

new investment, is it being diverted elsewhere, or are they doing the same thing as us?

MR. MILLS: Well, this is always pretty interesting, I think with Iran, because when you talk about closing Hormuz, of course, everybody thinks of Iran and there's been often right back from the '80s on with threats by various Iranian military people and politicians to close Hormuz, which they've never actually done or never really tried to do. Except maybe during the Iran-Iraq war, but Iran is totally dependent on the Gulf for oil exports and also for its petrol chemicals and also for most of its imports. It's only -- and its port sources, deep water ports are all on the Gulf as well, so for any -- they ported a lot of necessities. It's completely reliant on the Gulf.

Now, it's tried to develop a port to be (Chobaha) which is on the Indian Ocean coast adjacent to Pakistan, but that's not an oil exporting port. And it's very remote from any real population centers in Iran. As far as oil is concerned, Iran has talked ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

for a long time about developing (JASK) which is just outside of Hormuz, as an oil exporting port and linking it with a pipeline. It might be exporting Caspian oil through there as well -- through a pipeline from the Caspian region. Still, nothing really done on that yet. Of course, the sanctions have delayed any plans like this.

But Iran is just as vulnerable as Kuwait or Qatar to use in the Gulf and it's actually, it's more vulnerable than the UAE or Saudi Arabia, which is kind of strange. And I think this is one of the reasons why if there ever really was big conflict, Iran would only attempt to close down Hormuz as a last resort.

MODERATOR: So, really, it's in everyone's interest to keep the Gulf secure. Indeed, I think that's -- why don't we have a common security agenda that brings all the Gulf inhabitants, like, similar to what Giuseppe was saying about the Mediterranean and the center in Greece. It's just not going to happen because of politics, which I mean, I'm very elaborate on this because at the moment, we have less and less ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

channels of communications and we're -- we've even blocking what exists or what existed and we're pushing other nations like Oman and even Qatar to have less and less and less.

So, if there were to happen an incident, it could easily spiral into something much bigger because we don't even communicate.

MR. MILLS: Sure, sure, I thinks it's a problem and even if there was a regional corporation, body, that would be great, but in the current vertical situation, there's a lot of suspicion on both sides and there have been not much removed towards a -- I quess you could say it's a bit difficult because there isn't an external threat. It's not like the, you know, (inaudible) trying to see a big different. (Inaudible) when you've got the diverse states around the south trying to see that are concerned about the role of China. But in the Gulf, you know, the states in the Gulf are not concerned that the U.S. is going to try to shut down the Gulf, right, quite the opposite. So, the dynamic here is you have the two ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

opposing sides and they are -- they're the mutual threats.

I mean, obviously, I think if there was better regional security cooperation, that would be great, but I --

MR. MORABITO: That's not going to happen.

MR. MILLS: You're the expert, right on that, but I don't see it for now.

MODERATOR: Let's then move to NATO and one of your very important members, Turkey and its role in always translating (inaudible). What's your going? What you doing?

MR. MORABITO: Okay, answer the question.

MODERATOR: Well, just help us understand the role Turkey is playing at the moment as a hub and, you know, transit. They're trying to -- they're important for Russia. They're important for northern Iraq, Uzbekistan. There's lot of stories in the newspapers about potentially dark deals going on and so on. And how does it seem from within NATO and what would you do about it.

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MR. MORABITO: Okay, let's say, if you ask me as a NATO member or a representative of NATO that is one of our member, it's a democratic country, look, I say, a democratic country and stable and no problem. Okay.

MODERATOR: Okay, now I ask you as you say.

MR. MORABITO: Okay, look at the newspaper of two weeks ago -- three weeks ago. Putin declaring that at the moment of peace in Syria, they have to call out color the table, around the table the Kurdish people with, believe it or not, are receiving.

MODERATOR: Yes.

MR. MORABITO: And he can explain to you because morphologically, the pipeline that leave the sea route and that go to Irania had affected in some way from the Kurdish people. Whether in Iraq or in Syria or in the East of Turkey, the pipeline had to transit there. Okay, so if Turkey don't find the way to find an agreement with the Kurdish, of the socalled, now is -- I speak of something that exist, but doesn't exist, Kurdistan. Kurdistan is a five -- in ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

four country. Iraq, Iran, Turkey, and Syria. They speak the same language; they write in the same way. They pray with the same frequency, so be something, you know?

So, and with transit of the gas, of oil, transit from Kurdistan. Coal, it's okay, if it is a diplomat from Turkey, now stand up say, Giuseppe, Kurdistan doesn't exist, but that is a reality. So, this is very important. The hub of NATO, the hub of gas for the -- is there. [Inaudible 01:02:21] or we had to pass through Switz, or go out onto Africa. There is no other way. This is a morphological way where if you look at the map, this is a reality, their reality. So, and consider the [inaudible 01:02:35] of a nation has a lot of conflictuality. Sixty-two percent of a bargain on NATO are from -- are because of Turkey. Consider. This is what -- is not my duties was said from with the president of marshal, NATO marshal center, so more important than me. So, without problems, without real problems in there, now the government is stable, but what will happen? ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

Today's Tuesday -- last Wednesday, the president of the Republic of Turkey decided the Parliamentarian of Turkey have no -- any more the protection in their action because of their Parliamentarian. So, we had to read some also information in the fifth page of a newspaper, you know? What does he mean? That he want all the member of Parliament of Kurdish or the Kurdish Party [inaudible 01:03:48]. What will happen in the area? And look, the pipeline. Look, take the map of Turkey and look where the pipeline pass through. And, okay, and who will assure the security of a pipeline? And this is very important because, again, we get back to NATO.

NATO can help the nation, the transit nation to secure the transit line. NATO can [extract 01:04:19] the forces of a nation where the transit nation how to train this [inaudible 01:04:24] military guys to protect the line of communication. But as a NATO, you cannot [extract 01:04:33] them.

> MODERATOR: But now that you're speaking ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

openly, are there any under-the-table deals between NATO or its NATO nations and the Kurdish to protect the pipeline?

MR. MORABITO: There is a man named [inaudible 01:04:46].

MODERATOR: Right.

MR. MORABITO: But [inaudible 01:04:51] name, no?

MODERATOR: I didn't know the name, okay.

MR. MORABITO: But [inaudible 01:04:55] the Kurdish State. What does [inaudible 01:04:59] Syria now, no? Was created because this nation [inaudible 01:05:06] on the other side of the Atlantic, the side to support the policy and to have this party but to also pausing the all the people that put their boots on the ground against that.

MODERATOR: Yeah.

MR. MORABITO: Okay. I don't know if you have had a meeting with -- or if you ever had to visit these people. These people will [inaudible 01:05:32] at the one by one, male and female, before to give ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

back their territory. So for sure there is agreement. [Inaudible 01:05:42] forces -- I speak of my nation so nobody can quote me -- are training the Kurdish [inaudible 01:05:49] today. Today, this moment. So there is way to pro -- if you train them, if you give -- and know how to control the territory.

MODERATOR: This is very interesting. Let me just move onto another part of the world. Algeria. You earlier said Italy and to some extent maybe France are reliant on Algerian gas, and Algeria so far has been stable. What is it you're doing to ensure its continued stability, or are you waiting [crosstalk 01:06:24].

MR. MORABITO: You have to buy -- you have to ask my friend, [Amor Abutune 01:06:28], no?

MODERATOR: Yeah.

MR. MORABITO: Amor Abutune, probably you know -- some of you knows Amor Abutune the main clan, the living of a mountain between the Libya and Algeria.

> MODERATOR: Yes. ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

MR. MORABITO: And one -- when my cousins decide to defeat Qaddafi, they came down from a mountain. It would change the study of the life of Qaddafi. Anyway, and now be serious. For sure the line of communication from the south or the center of Algeria, you can be more precise. To the shore of Algeria are, in the last 40 years, suffered only minor problems. I don't say I've got problems, in general. Probably, probably -- now this is a scenario, but we studied with my people, but it's a -- an agreement. Freedom of transit in direction of Libya through a desert, and no problem, well, on their line because speaks -- now I speak as soldier.

A pipeline of 1,000 kilometers, 1,000 kilometers meets to have the soldier every 50 meter. Okay? But a soldier is not enough; we need two soldiers every 50 meters. And they can keep a keep one every four hour, six hour in the desert, but when they have to be change it. But is enough to have a concentration in the desert of 50 people, you cannot react, or you will destroy the pipeline. I speak of -ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

- if some of you was a soldier knows what I mean [inaudible 01:08:18], but they said 50 people can defeat the 10 soldiers in [inaudible 01:18:25]. Okay. So, if nothing happened in the area, they don't need -- it's not because of it's a control of a state of Algeria because there is an agreement. Because any moment, any moment [inaudible 01:08:40], Al-Qaeda can create a big problem. If you remember when --

MODERATOR: Let just me understand this properly, there's an agreement between...

MR. MORABITO: No. You told me. [Laughter]

> MR. MORABITO: I don't -- I cannot say --MODERATOR: Agreements --MR. MORABITO: -- because [crosstalk

01:08:55] come to my office.

MODERATOR: The Algerian is directing --MR. MORABITO: Probably. Something is happening. If you remember, I can't make the name because now he's retired. If you remember, four years ago when Kurdish was attacked [inaudible 01:09:09] in ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190 the south three or four years ago. Three years ago.

MODERATOR: Three. Yeah, 2013.

MR. MORABITO: Three years ago. 2013, yes. MODERATOR: Starting.

MR. MORABITO: Three years ago, probably you'll remember there was an attack of a gas station in the south, and what was reaction of the Chief of Defense of Algeria? No discussion with a terrorist. No? No problem for [inaudible 01:09:37] people, we disregard completely. It was [inaudible 01:09:40], Spanish, a couple of [inaudible 01:09:43], technician, they were there. You know? So, they officially, in case of attack, they don't have any agreement. No discussion because this is important for [inaudible 01:09:57].

And this is important for Europe because Algeria's one of the main producer, and they [inaudible 01:10:07] gas in the market especially through Italy and Spain. For -- this is very important. [Inaudible 01:10:13] very important. And if you speak with an ambassador of Algeria, they will ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

tell always you but [inaudible 01:10:24]. And in fact, the so-called [inaudible 01:10:30] not cleared a lot of problem in Algeria. No change. The main problem are Indonesia. But look, Indonesia has no gas.

MODERATOR: Hmm.

MR. MORABITO: But, okay, now we open a box of Pandora [spelled phonetically], because if you start to speak of what happening in the south with Iranian, it's a long discussion if you have some question or we can speak outside. But this is very important. During a meeting in Rome last two weeks ago was very clear, the position of Algerian ambassador and Indonesian ambassador in Rome -- not in Rome, they were in this conference. Both the government refuse absolutely that you give -- that in the Arabic world is given their rank [inaudible 01:11:27]. This is very important because if you are meet, they have a rank -- because also to be a [nostate actor 01:11:37] is a rank for them. You know? Is a richest level of importance, you know? You are a ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

no-state actor; you are something more than terrorist. I don't want to have any -- because if you were to deal with no-state actor, they cannot act as they have to deal with terrorist.

So, Algeria -- if I have to put the one [euro 01:12:01], I put but in the next five years, they're probably in Algeria. With one Euro, no more. Okay.

MODERATOR: So right, you've put a lot already at stake here. [laughs] Thank you very much. Let me move now to the allegiance. We have 15 minutes left, and I'll take a couple of rounds of questions. We'll start there please, and then I'll come back to you [inaudible 01:12:29]. Please.

SPEAKER: Hello. Yeah, good evening. My name is [inaudible 01:12:42]. I am a ex-[inaudible 01:12:46] master, and used to trade this area as we spoke about on [inaudible 01:12:51] gas and oil, both. As the discussion progress, we can -- we all figured out that really no-state actor has much to gain by blockading the [inaudible 01:13:02] for any ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

significant point of time. No-state actor is really going to benefit from that. And so those non-state actors are concerned to be able to blockade [inaudible 01:13:15] for any significant time, there's [inaudible 01:13:18] impossible. There's quite a bit of military presence in that area. Like we saw in the case of Red Sea by the sea problem, all it took was for the 21 nations to put their [inaudible 01:13:29] vessels up and down, helping the [inaudible 01:13:32] and other kind of shipping to move, and the problem kind of died a natural death. Well, at least [inaudible 01:13:38] now.

MODERATOR: Yeah.

SPEAKER: So, really, the [inaudible 01:13:43] perception for [inaudible 01:13:44] blockade, having any long-term effect, I somehow beg to differ here that this can significantly affect energy security, especially from the [inaudible 01:14:00] -- from the perspective of energy consumers. I mean, if you look at Asian countries, yes, [inaudible 01:14:08] the biggest exporter of natural ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

gas [inaudible 01:14:11] through the [inaudible 01:14:12]. But Australia's coming up [inaudible 01:14:14]. Australia by 2020 shall have the largest plate capacity of natural gas doubled over. Shell gas, like [inaudible 01:14:22] pointed out, is a trump card which U.S. has. West Africa is emerging, Mozambique is planning to start. By 2020, let's see how these things happen. I mean, there are other sources of energy, so as it was mentioned earlier in the discussion that having alternative sources is also a form of security. Because you are not able to completely get off the supply.

All this put together, the tradeperception looks a little obfuscated. Who shall tracking shipping finally -- I mean, in the nut -- in nutshell, what we are talking about is protecting shipping from these ceilings, and who shall track them, and what do they have to gain with it apart from a small, localized or a short disruption?

MODERATOR: Thank you.

SPEAKER: Hmm-hmm. ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190 MR. MORABITO: May I know where you come from?

SPEAKER: Pardon me?

MR. MORABITO: Where you come from? SPEAKER: I am originally from India.

MR. MORABITO: It was (inaudible). Now, you know why, because finally the India decided to give freedom to the Italian, that they were doing their duty in the Gulf.

MODERATOR: Let's take a couple questions and then I'll come back to you.

SPEAKER: No, no.

SPEAKER: Thanks for that presentation. So you forgot something important. The multi-nationals, the petroleum multi-nations is earning too much. Why don't these multi-nationals secure, I mean, transition on transportation of gas and petrol. They can hire, maybe special forces like, Blackwater or something like this.

I think intervention would provoke people in the area and NATO is more weaker to predict these ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190 routes. We remember the defeat of NATO in Afghanistan. The Taliban is still there and after ten years they withdrew.

About -- There is a very easy solution, you said democratic Turkey will grant the pipeline theirs. Also democratic regime in Egypt will guarantee the safe (inaudible) of Sinai. Why you support (inaudible) and his killing of his people and has killed (inaudible). Condolences for (inaudible) who is assassinated directly by (inaudible) energy. Thank you.

MODERATOR: Okay, let's take question involving the perception of risk.

MR. MORABITO: It's very much the way you framed it of the global security, ecosystem. (Inaudible) lack of energy, but in fact for the producers it's a huge risk for the gas countries. But maybe we'll hear Robin's view on this.

MR. MILLS: Well, you know look - I think it's a very good challenge and it's precisely for that reason a lot of people have written papers on how ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

Hormuz could be closed down and what would happen and so on. And you deliberately, for that reason try to make my paper broader because I pretty much agree with you. I think it's a low probability event. But one with very high consequences, that's why it's kind of interesting to think about. No, I agree, under normal circumstances I don't think any of the states around the Gulf are trying to close down Hormuz in an extreme case, as we had in the Iran-Iraq war, when people are fighting for survival. It's not impossible and the consequences will be very damaging.

Also these methods you mentioned for tackling the security things and the naval patrols off Somalia against piracy and so on. Yes of course they have been effective. But they do come at a significant cost and you have to look at - Is it cheaper have these large naval patrols or would it be better to invest in alternative routes or invest in stabilizing Somalia or any of the other possible solutions. And even if there isn't a disruption it still imposes some kind of a cost on, to the states in ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

that region and the multi-national forces. And in this kind of lower level disruptions, I mean, even if there isn't a closure of Hormuz, there could still be sabotage, it could still be - and there was, of course, a few years ago a bomb attack on a tanker, Japanese tanker, coming through Hormuz which was never really pinned down, not public anyway, to who was behind it. A little known terrorist group could get more serious.

You know you can particularly imagine the Red Sea that might get more serious where you've got, you know, Yemen, in particular, as a base of terrorist activities. Wouldn't shut down the Red Sea but they're still be a significant danger to ships can cause cost of life and so on.

Your points on the gas, you know, yes, of course, the gas market is getting more diverse and yes we've got more supply out of Australia and coming now out of the U.S. And possibly South Africa. Cutter at the moment is about a quarter of the world's energy capacity, so it is a huge, huge factor in the global ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

energy market.

Now, by 2020s it will be about 20%. So it will be less important but still important. And losing that would be something the Europeans could probably cope with but it would be disastrous for Japan in particular and for Korean.

And you what to think about what's the knock on impact? If you lost supplies from Qatar, the Russians would probably step up and be willing to supply more to Europe. But there would be some quidpro-quo and the Russians might have their own things they'd want in return for that.

It's not an ideal, I mean, of course, there are solutions, but they all come at their own costs and their own implications. But I think if challenged, I do basically agree with the premise of your point.

SPEAKER: Thank you so much. MODERATOR: May I (inaudible crosstalk) SPEAKER: Yes, the point made by Doctor (inaudible)

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MODERATOR: Both of them.

SPEAKER: Instead of under the table deals MR. MORABITO: Okay, under the table. No, okay the justification of my friend from India. I am surprised with an Indian asked a question. Oh, no, we pray for India, not because, you appear as Indian. You appear more European than Indian. Okay, when NATO was asked to (inaudible) in the Gulf in the heart of Africa, the ship were there, you were participating and now the problem doesn't exist anymore or is it irrelevant. Only India had the problem with the Soviet doing that but it solved. So, you are the last to ask this question. So, or you can stand up and say I am from Malaysia, you can ask me a question, otherwise, an Indian is (inaudible) because the only nation creating problem is India. But anyway, doesn't matter. My friend.

SPEAKER: (Inaudible)

MR. MORABITO: We can have a discussion -separate discussion. Speak of CC. I am a fan of CC because he was a fantastic officer, we stuck together, ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

you know. He was (inaudible), then he was a veteran of Korea. Let's say, this is important that you know that. Do you know many inhabitants has Egypt, 90 million.

You know, CC has to control a national 90 million. Wait a moment, the minority in Egypt, the minority is (inaudible) because nobody knows, I have to tell you, make a picture before speaking, people have to know, a situation we have to face.

The minority mentioned of the cops. There are more cops in Egypt than Greek, in all Greece. Just to give you an idea, no, no, you have to have an idea. He has to come to a nation where the minority are more (inaudible) than Greek. Twelve million.

So, I start to think I speak as a (inaudible) point of view. You cannot control a nation with some problem inside of 90 million of people. Put out the (inaudible). Seventy-eight million are not Christian, but have a lot direction inside. Comes from the brotherhood. Problem not (inaudible), call it as you like (inaudible). ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

Remember the stick in the carrots. Sometimes it's needed to use the carrots, but sometimes we need to use the sticks.

The only way, in my opinion, this is Giuseppe opinion; to control energy now and it's good for all of us, that they ship to a stable country because where our (inaudible) all the people of North Africa together. If you withdraw the people from Jordan to Mauritania, all the population together are less of in Egypt. This is mathematics my friend. And if you pretend to control a nation of 90 people, kindly, in this moment, no chance.

SPEAKER: Then you (inaudible). Why?

MR. MORABITO: I know, I don't say, but sometimes, sometimes this history teach. The history of the last 20 years teach that sometime it's better than to have strong men, then have no control.

Historically, probably historical -- not me, the European nation, the nation that share the border with (inaudible)think it's better to have strong men in leadership. Probably you are right, it is not an ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

example of democracy is government, but they unified a stabilize the country. Probably, that was the costs in the country, not of four million inhabitances, 90 million inhabitants.

MODERATOR: We can continue the discussion over (inaudible) because (inaudible) Okay, okay. You also don't deserve strong man with a ...

MR. MORABITO: (Inaudible) is the same problem because we are more Kurdish (inaudible).

SPEAKER: Yes.

MR. MORABITO: Because mathematic.

MODERATOR: I know, if you follow the same logic then Europe should be the first to be controlled.

MR. MORABITO: Yes. Controlled (inaudible)

MODERATOR: They're much more diverse than us. But let me move to another point that is (inaudible) that I think is very interesting. Why is the private sector not picking the coast of these alternative routes, these mutli-national companies and so on. They seem to have it relatively easy, is that ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

right?

MR. MILLS: Look, I think if you have local security issues, and all companies deal with it all the time from Nigeria to Libya and Iraq; they own these situations and they hire security guards and so on. They work with the local authorities to whatever extent they can and they use a lot of private security. That's just a reality of doing business in countries where there are security threats.

I think the same with shipping as well. The ships take security measure, there's been -- ship owners have been --this has been my impression, I'm not a naval security person but while I sailed ship, I was pretty unwilling to put armed guards on ships for all kinds of legal and liability reasons.

Fortunately, the military response to piracy has been good they haven't had to go down that route. But I guess if the situation got really bad, the solution of armed guards on ships is well, if necessary.

> But if you think about big scale stuff, if ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

you think about multi-national companies contributing to having their own military forces and guarding facilities on a big scale, -- I mean that kind of thing has a bad history and you will find a shell or Exxon having a private army and defending its needs for facilities in specific places. That is the companies don't want it themselves. Politically, it is a disaster, they're seen then as a foreign occupying force by the local government. They covered huge pressure from western NGOs, you know, if you go back to the 20s and 30s this happened in Latin America and I think the oil companies have learned their lessons. That's just the long term a very dangerous way to go. I mean they're companies not states and shouldn't have their own private armies.

MODERATOR: Thank you so much. We'll take two more questions, please. Then the gentlemen just in front of you as well.

MR. PIERRE: Hi, my name is Rene Pierre from (inaudible) center in Qatar University. My question is maybe more for Robin Mills. In publication you go ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

in some length on the interest and potential of the (inaudible) network that actually would lead to (inaudible) export to Oman.

Could you maybe go over the political obstacles and (inaudible) and a way maybe to go through it and in case it's possible, what kind of time line are we looking at here?

MODERATOR: And the gentleman in front of you, please.

SPEAKER: Can I ask you both, other than the countries we've discussed so far this evening are there any particular vulnerabilities where there is a risk of attack on a pipeline or something else which could lead to an unplanned outage which could affect the markets.

MODERATOR: Thank you. Robin.

MR. MILLS: Yeah, to just (inaudible). This is one proposal, there have been other proposals. This may be apprised more generally. I mean, just to give background on (inaudible)is (inaudible) in Southern Oman, on the Indian Ocean, there is a large ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190 oil facility which has recently, I think, been announced that the Omanis can go ahead constructing it. It will be linked to their pipeline network, but it could be linked to other GC pipe networks and I think there have been discussions with the Kuwaitis over this.

Of course, in principle the UAE could connect quite easily and the UAE has a boarder with Oman. Also Qatar could but it would have to go through Saudi Arabia. Of course, the Kuwaitis would have to go through Saudi Arabia as well. Or they would have to deliver oil by ship to the UAE and then through to Oman. But in principle that's a possibility. Something similar is using the Port of Fujairah in the UAE which already has this pipeline running from Abu-Dhabi through to Fujairah. I mean again you could lead that pipeline into Saudi Arabia, Qatar, and other countries

But I mean the general idea of having a pipeline network bypassing the Straight of Hormuz, yeah it's under serious discussion. If you think ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190 about the (inaudible) facility; in 2016 if they're going ahead. That will be the completion of the first phase by 2019 or 2020. So, you know, probably in three or four years, if it were to go ahead.

Really the obstacles are first off finance. Who would cough up the money for this? One of the regional countries that sees the risk is serious enough and it wants to have the insurance, or maybe an outside player. Maybe China for example might want to sponsor or at least partly sponsor that to improve Chinese energy security.

The Chinese of course constructed the pipeline to Fujairah, though they didn't pay for it a Chinese company built it. It's part of Chinese strategy to improve energy connections. So maybe the Chinese would be a part of (inaudible). I'm speculating others may be; India would be quite useful for or other interested countries.

So it's quite realistic and I think it's just a question of - there is some political question over this, but generally Oman is a well-regarded, ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

fairly neutral member of the GCC. So that doesn't present any particular problems. I think the pipelines going through Saudi Arabia and other countries is a bit more tricky and so maybe it's more realistic to have a route that goes through the UAE and then Oman and then (QA) or Qatar or whoever else could take oil by tanker and drop it off in the UAE and then through.

So, but I think it's a reasonably realistic proposal. It's primarily a question of financing.

SPEAKER: And what are the areas of potential risk, that are particularly vulnerable at the moment that you have not mentioned? Also, Robin if you can think of something.

MR. MORABITO: The added pressure is at this moment in the room is the safe route. Okay? The safe route is very important and what is happening with -in the -- let's go China Sea will affect in the future.

Because this is the line, where you can probably tell better than me, all the support --ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190 manages support of China is to arrive in China. And China has to control this and other street.

This is a matter we never discussed, a matter we will see what happened is the Arctic route. Now, because of reduction of the ice there is more transit in this area. But it seems that way I have found an agreement. The problem in the Gulf of China is a problem in the future.

MODERATOR: Great, well, thank you so much for both of you. I think it has been absolutely fascinating and I have learned quite a lot about a subject I knew very little about. I think it's really an eye opener.

It's clear from what we've heard today the consumers are doing their business to try and secure the transit and routes; whether it's above the table or under the table or wherever, it is happening. They are looking to the future and they're making sure that those supplies are continuing. Fortunately, the suppliers are not necessarily considering (inaudible) in the Gulf (inaudible) a vacuum in terms of ANDERSON COURT REPORTING 706 Duke Street, Suite 100 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

considering the security of energy production and transit.

Maybe there is an opportunity here to start direct contact and some kind of mediation with Iran over a Gulf - all incisive strategy on how to protect the supplies.

With this I'll bring this to quick conclusion and thank you so much for joining us. I hope you enjoyed the discussions. We have a light meal offered in the foyer so please join us; we'll have more time to speak. Thank you very much.

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