# EXECUTIVE SUMMARY (EXSUM) OF THE ENERGY SEMINAR WARGAME

The final game was played on 12 December 2014, at Naval Postgraduate School. The following faculty members participated in the war game:

a. Professor Daniel Moran as the U.S. player.

b. Professor James Russell as the OPEC player.

c. Professor Jonathan Czarnecki as the China player.

d. Professor Richard Brown as the Russian player.

e. Colonel Peter Frank as the European Union (EU) player.

The game started with a short introductory brief by the moderator (game facilitator). The brief covered the salient points of the game, which included:

a. Purpose of the war game.

b. Game objectives.

c. Game rules.

d. The players' objectives.

e. Criteria for scoring during the game.

d. Administrative detail.

After the brief, the moderator started the war game by announcing the start state followed by the first vignette. During various vignettes, the following significant points were raised by the players:

**Vignette 1 (oil price $60 /barrel)**

This vignette is "overtaken by reality" since the current oil price is already below $60 / barrel. Nevertheless, discussing the vignette led to interesting viewpoints.

a. The U.S. player argued that the decision whether or not to continue shale production will be taken by "the market," i.e. the oil companies. The U.S. government has very little influence on its shale industry.

b. The OPEC player highlighted that OPEC's capacity to control prices is limited. He further argued that historically OPEC has shown resilience to short-term price

fluctuations; therefore, in the given situation, OPEC would maintain its current production capacity and would not attempt to disrupt mean price reversion of market.

c. The China player showed inclination to lessen reliance on oil and diversify energy resources by investing more in energy production through coal-state engineering i.e. the changing of solid coal into liquid and gaseous states.

d. The Russian player showed interest in acquiring technology to tap in its shale gas reserves.

e. The EU player strengthened relations with the U.S., but also maintained good relations with Russia and China, because the EU player considered that multipolar world would be beneficial.

**Vignette 2 (Asia Conflict Scenario——Oil Price $150 /barrel):**

This vignette proved to be the most interesting one. However, details matter when discussing a conflict vignette. Players interpreted details different, so it is important to be absolutely clear.

a. The U.S. player argued that China's internal stability is important for stability in the region; therefore, it is in the interest of the U.S. that China remains stable.

b. OPEC player considered that the conflict was temporary and that OPEC would try to maintain its trade with both belligerents, China and Japan, because both are important customers of OPEC's oil.

c. China player argued that high oil price would make energy production from transforming coal-state profitable and China would start enhancing its coal energy production.

d. Russia benefitted from high oil price and helped China develop technology to produce energy by transforming coal-state.

e. High oil price adversely affected EU's economy; therefore incentivized development of renewable energy. EU attempted to play the part of an honest broker.

**Vignette 2A (Asia Conflict Scenario with U.S. Involvement——Oil Price $175 /barrel):**

As with the first vignette, also important here is to be specific. For example, what exactly does "involvement" mean? U.S. involvement in the region easily justifies a higher oil price of $175/barrel. This made the game more interesting.

a. The U.S. player wanted to help EU economically; the U.S. government was willing to purchase oil from oil companies and sell it cheap to the EU. It also wanted to subsidize oil for local consumers.

b. OPEC decided to follow the U.S. lead, even to the extent of stopping supplying oil to China in a bid to stop the conflict. The China player realized that the conflict was making China instable and wanted to end the conflict as soon as possible.

d. Russia decided not to intervene in the conflict, but increased military spending from the increasing profits from oil industry.

e. EU maintained its strong relations with U.S.

**Vignette 3 (Oil Price $35 /barrel):**

a. The U.S. wanted to put a price cap on oil to stabilize OPEC. But the U.S. player argued that there had to be a balance between stabilizing oil producing countries and oil consuming developing world. Therefore, oil price needed to be maintained at a price that was favorable to both OPEC and consumers of oil.

b. The OPEC player argued that very low oil price such as $35/barrel would strengthen the OPEC alliance since it is in every member's interest to get the oil price back up to an acceptable price.

c. The China player opined that low oil prices would boost the Chinese economy, which would enable China to increase its influence in Middle East, and the developing world through Foreign Direct Investment (FDI).

d. Russia decided to cooperate with OPEC to reverse the oil price. If Venezuela became instable or fragile then Russia was ready to provide economic assistance to stabilize Venezuela.

e. The EU showed concerns over petrostates becoming instable; particularly in the North African region, because instability could trigger a flow of refugees into Europe.

**Observations**

The Following observations were noted during the discussion:

a. Since U.S. player argued that oil companies, rather than the U.S. government would decide on shale production, it may therefore be appropriate to include reps from oil companies to yield meaningful results.

b. The oil consuming developing world should have been included to give useful input for Vignette 3; For example India and Turkey could have suited that position.

c. Countries involved in a conflict and the nature of the conflict would have different implications for the players. Players' decisions would change according to

nature of the conflict and belligerents. For example, if Vignette 3 entailed a conflict involving Ukraine or Syria then the response of players would have been much different.

d. OPEC does not have a joint / coordinated Foreign Affairs policy like the other players in the game do. Therefore, OPEC stands out and it is more difficult to play OPEC.

e. There is a fine balance between adding more detail and keeping the game "simple." Yes, there are far more variables in play when discussing economic consequences and diplomatic relationships vis-a-vis including details in the vignettes matter a lot, however, this will complicate the game further.

f. This final play was one data point. The game has to be played multiple times in order to find a recurrent trend.

**Final Thoughts**

a. Our overall assessment is that the U.S. shale revolution does not have a big influence on the diplomatic relationships, failed state's index and economic balance in the world as we thought it would.

b. The U.S. is both an oil producing and manufacturing industry state, as such; both extremes of oil prices affect its economy. It is therefore in the best interest of the U.S. to maintain an optimal oil price for its economy to remain stable.

c. JWAC and other future players of this game have the option of varying on the number of players as well as the number of vignettes.

d. The more times the game is played with different players, the more clearly a common trend will emerge from the results of the game.