The events of 9/11 brought dramatic changes at the global level. Following the events of 9/11, many countries joined the U.S. – led international coalition against terrorism so do Pakistan. It has also been an active player in the U.S. backed international war against terrorism. U.S., soon after launching a war against terrorism used Pakistan’s sea-ports and its land routes to provide logistical support to its forces fighting in Afghanistan.

With an increase in the troop’s number in Afghanistan after U.S. President Obama’s decision to send additional 30,000 troops in Afghanistan, the need of non-lethal as well as lethal material support also increased. So, to facilitate such a huge amount of troops in a landlocked country Afghanistan became an issue for U.S. Insecure environment in Pakistan and vulnerable ground routes became a problem for U.S. So, in order to avoid any complications and dependency on any one route, U.S. military in late 2009, established an additional and alternative route for purveying its forces in Afghanistan.

Northern Distribution Network (NDN), the new transit corridor for the logistics is a supplement to the only route to Afghanistan through Pakistan that had been used for all type of military and non-military supplies to U.S. forces engaged in Afghanistan since 2001. Withal, the main impetus behind establishing alternative routes is increasingly poor security environment in Pakistan especially in the bordering area with Afghanistan. Northern Distribution Network is actually a network of water, rail and road links to deliver shipment to Afghanistan through Central Asian states.

Moreover, with the killing of Osama bin Laden on May 2, 2011 in a raid by U.S. Navy SEAL on the soil of Pakistan, the U.S. – Pakistan relationship has deteriorated. The security of the main supply line that U.S. has been using since 2001 for supporting its forces in Afghanistan might also came under threat.

* The writer is Research Fellow, the Institute of Strategic Studies Islamabad (ISSI).
For the new security reasons U.S. administration has begun to look to the partner countries of Northern Distribution Network, especially Central Asian countries to minimize its reliance on Pakistan for logistical support to Afghanistan.\(^1\) So, the importance of NDN to U.S. has increased and this will benefit the Central Asian countries economically.

Northern Distribution Network is fulfilling the tactical and strategic needs of U.S. as it is a network of routes to deliver non-lethal military cargo through Central Asia to Afghanistan. It also has strategic implications for the Central Asian states.

Pakistan might have political and economic stake in the success of Northern Distribution Network. Whereas U.S. apart from using NDN as a non-lethal supply route, also views it as a driver for economic development in the Caucasus and Central Asia and as a stabilizing factor for Afghanistan. U.S. wants to expand the security co-operation with the Central Asian states which would indirectly increase the capacity of Northern Distribution Network.

As far as Afghanistan’s stability is concerned, President Obama’s decision to drawdown it troops from Afghanistan would also increase the faith of Afghani people in its government and hence would contribute to make Afghanistan a stable place to live. However, NDN in the wake of withdrawal would also be used as a trade route and will enhance Afghanistan’s economic growth and this would also be a contributing factor to Afghanistan’s stability.

In discussing and analyzing the means and routes of logistics, this paper is divided into two parts followed by a conclusion. The first section provides a brief overview of the Afghanistan supply lines i.e. Pakistan Ground Lines of Communications and the Northern Distribution Network. The second section takes a more detailed look of the Northern Distribution Network and implications for Central Asian countries with respect to their interests in Afghanistan. This is followed by a brief conclusion.
The Afghan war: U.S. transit reliance on Pakistan and its search for alternatives

Part 1

Background

Logistics...in the broadest sense, the three big M’s of warfare--material, movement, and maintenance. If international politics is ‘the art of the possible,’ and war is its instrument, logistics is the art of defining and extending the possible. It provides the substance that physically permits an army to live and move and have its being.2

Distribution of material into & around Afghanistan

Distribution of material, such as military supplies and equipment into and around Afghanistan and employing both surface and air modes of transportation over a variety of routes is a complex procedure for the U.S. Department of Defense (DOD). U.S.’s ability to provide logistical support to its troops deployed in Afghanistan depends on its capability to synchronize these actions into a single seamless process.

According to the U.S. Joint doctrine, “distribution is the operational process of synchronizing all elements of the logistic system to deliver the “right things” to the “right place” at the “right time” to support the joint force.”3

Following organizations play an essential role in assuring the delivery of materiel to support the units deployed in Afghanistan:4

1. U.S. Transportation Command,
2. U.S. Forces – Afghanistan,
3. Joint Sustainment Command – Afghanistan,
4. Army Central Command’s 1st Theater Sustainment Command,
5. Air Force Central Command’s Air Mobility Division Plans, and

The U.S. Transportation Command is designated as the owner of distribution process for U.S. Department of Defense. It directs the transportation programs for all the organizations caught up in supplying the material into Afghanistan, and it depends on all its military service constituents i.e. Air Mobility Command (Air Force), Military Sealift Command (Navy), and Surface Deployment and Distribution Command (Army). Some of the organizations mentioned above set up presidencies’ for supply of logistics for the Afghanistan theater whereas the Central
Command Deployment and Distribution Operations Center bridges the gap between strategic and theater distribution.\textsuperscript{5}

A variety of surface and air transportation modes are used for the logistics support into and around Afghanistan. However, most of the supplies and equipments bound for Afghanistan are delivered through surface modes and the remaining transported through airlift.

General McNabb mentioned that “mostly non-combat materials, such as food, water, fuel and construction supplies, are delivered by ground, while military weapons and other “sensitive” equipment are flown in by cargo plane.”\textsuperscript{6}

\textbf{Afghanistan supply lines}

1. Pakistan Ground Line of Communication
2. Northern Distribution Network

\textbf{Pakistan ground line of communication}

After launching the war against terrorism in the wake of 9/11, for the U.S. the immediate requirement was logistical support for its troops to be engaged in Afghanistan. To operate in such a landlocked country i.e. Afghanistan, it was more than a challenge for the U.S. At the beginning, the only possible route to reach and facilitate its forces in Afghanistan was Pakistan, which is also an active player in war against terror.

Hon. P Jackson Bell, Deputy Under Secretary of Defence for Logistics & Material Readiness, US DoD said that, “support for our forces in Afghanistan is the most difficult logistics assignment we have faced since World War II.”\textsuperscript{7}

In addition, General Duncan J. McNabb, commander of U.S. Transportation Command, also said in his interview that, “from a logistical perspective, Afghanistan isn’t the ideal place for conflict because the landlocked country is made up of mostly desert and mountainous terrain. However, convoys use several different “gates” into Afghanistan along the country’s eastern border with Pakistan.”\textsuperscript{8}
To sustain their forces in a difficult and hostile terrain, U.S. and coalition forces needed to bring in a variety of material into Afghanistan. In addition, each member of the coalition is responsible for supplying its own forces. For Instance, from the day one the transit corridor used by the U.S. for supplying its forces was the Karachi sea port in Pakistan.

Pakistan Ground Lines of Communication (PAKGLOC) i.e. approximately 2,000 km long has been the most important supply route for NATO led International Security Assistance Force (ISAF) in Afghanistan until now.9

Afghanistan’s main supply line through Pakistan is divided further into two routes i.e. the Khyber Pass, west of Peshawar; and the other is the Chaman, near the city of Quetta.10 This is the shortest possible route for U.S. supplies is Torkham to both Kabul and its nearby Bagram Air Base, the major U.S. installation in Afghanistan. Approximately 4,000 Pakistani drivers deliver around 150 truckloads of supplies to Afghanistan every day.11

According to the available data, about 75 – 80% of “NATO and U.S. supplies bound for Afghanistan including gas, food and military equipment are transported over land through Pakistan.”12

**Vulnerabilities in Pakistan ground line of communication**

The supply lines through Pakistan possess huge difficulties in moving the material along with great security risks. Moreover, U.S. Department of Defense (DOD) job to supply material was affected by the restriction on the number of trucks permitted to cross into Afghanistan each day, especially at Chaman. The DOD is highly dependent on the private contractors for delivering the supplies and equipment and cargo security whilst in transit.13

Recently, the supply lines have came under threat because of the intensification of the Taliban insurgency and the supply lines have been subjected time and again to terrorists’ attacks. For instance, the single biggest attack on U.S. supplies in seven years that destroyed 160 trucks
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was launched by the insurgents on December 7th, 2008 near Peshawar. In addition to terrorists’ attacks on the supply lines, many drivers were also kidnapped and threatened as well.

Another challenge that U.S. logisticians face along the Pakistani route is ‘pilferage’. Pilferage in Pakistan reached 1 percent which amounts to $16 million in recent years but was reduced to 0.5 percent through a series of U.S. military measures.

Map 1: Pakistan Supply Routes

Impetus behind the establishment of northern distribution network

In recent years, the delivery schedules of logistical supplies were disturbed by the increasing insecurity in Pakistan, constant insurgent raids on the supplies and supply lines into Pakistan, pilferage, kidnapping of drivers and trucking strikes. Therefore, the compulsion behind the evolution of Northern Distribution Network (NDN) is the military’s immediate needs.
The overall security situation has convinced the U.S. defense planners to search for alternative methods to resupply their forces. The options available to the U.S. were to either to air lift all the material to war zones or to establish new ground lines of communications.

General Duncan J. McNabb said that, “if we had to do everything by air, you would see a Berlin airlift.”\textsuperscript{16} But to air lift the material would be an expensive business for U.S. As according to NATO calculations, “airlifting supplies to Afghanistan costs a whopping $14,000 per ton, or roughly $7 per pound. In addition to the high cost, the air option may not be able to handle the requirements necessitated by an expansion of NATO forces in Afghanistan.”\textsuperscript{17} While taking into account the high cost of airlifting the material, this option was not viable.

Acknowledging the given situation of U.S. economy, trust deficit in Pakistan - U.S. relations, Pakistan’s growing insecurity and high costs attached to the airlift option, U.S. then looked for other ground routes – a new strategic access to supplement the existing one.

In due course, U.S. established a network of routes to deliver non-lethal material to its units deployed in Afghanistan. This new supply routes network is known as Northern Distribution Network (NDN). The route starts from the Baltic and Black sea and reaches to Afghanistan through Central Asia.

Previously, NDN entertained about 35 percent of the non-lethal supplies bound for Afghanistan whereas it is handling 50 percent supplies presently.\textsuperscript{18} As, the trust deficit and the gap between U.S.-Pakistan relations increased after the May 2\textsuperscript{nd}, 2011 U.S. operation on the soil of Pakistan, U.S. decided to increase the flow of supplies through the Northern Distribution Network by 75 percent by the end of this year.\textsuperscript{19} And also decided NDN to be a permanent operational route for both lethal and non-lethal supplies but it would involve a series of new agreements with the existing authorities of Russian and Central Asian governments.\textsuperscript{20}
The event of May 2, 2011 brought the northern ground line of communications to the forefront. U.S. hence revisited its logistical policies and moved towards north. U.S. wants to minimize its reliance on Pakistan’s routes, and for this U.S. has started to rapidly enhance its aerial and surface routes by expanding them through the Central Asia and Russia, there are fears in the U.S. that Pakistan could cut-off the main supply lines as relations deteriorate further.\(^{21}\)

However, shifting and establishing new supply lines are likely to increase the cost of war. According to a CRSS report, the logistics alone cost the U.S. and NATO countries 4 billion dollars a year. Supporting a single soldier in Afghanistan costs $1 million per year whereas a single gallon of gasoline costs $400.\(^ {22}\)

Northern Distribution Network (NDN) is the result of a series of negotiations between U.S. and the countries in Caucasus, Central Asia, and Russia to deliver supplies through water, air, rail and roads into Afghanistan. It is operational since the first half of 2009. NDN is approximately 5,000 kilometers long with an expensive rail route.\(^ {23}\)

The NDN plan is based on a series of commercial agreements between the local companies. Moreover, NDN also offers multiple routes into and around Afghanistan for commercial vendors as well.\(^ {24}\) NDN is also being seen as an initiative for regional developments.

To promote and encourage an affirmative response for Northern Distribution Network, the U.S. embassies in the region declared that the U.S. looks forward to buy many non-military goods locally to supply to its units in Afghanistan,\(^ {25}\) which would give economic incentives to the participating countries. Hence, the logic of NDN plan is dual in nature; as the “reliance on multiple transit corridors increases both the security and the leverage of the consumer (U.S. military)”\(^ {26}\) as well.

Permission of transit states to allow non-military supplies

U.S. wants to develop and strengthen the security co-operation with
the Central Asian countries which would also help in increasing the
capacity of Northern Distribution
Network. Northern Distribution
Network will address the strategic
needs of the U.S. and also assist the
Central Asian countries to strengthen
their ties with U.S. and also with
Afghanistan. Active role of Central
Asian countries is vital in
Afghanistan’s stabilization and
reconstruction. With a plan in mind,
U.S. officials had to influence the
transit states to let non-military
supplies through their territories.

Russia

U.S. had already secured an agreement with Russia at NATO-Russia
summit in April 2008 that will enable the U.S. to transport non-lethal
supplies via Russia. In addition, Russia in mid 2009 signed another
agreement that enabled the U.S. to move its military personnel and
material through Russia to Afghanistan. This will also facilitate the U.S. to
further branch out the transportation routes. According to the agreement
4,500 flights are permitted per year. This new route will save $133 million
in fuel, other maintenance and transportation costs and this agreement is
free of any air navigation charges. 27

Tajikistan

In January 2009, the then Commander of U.S. Central Command
General David Petraeus during his visit to Tajikistan discussed the need of
an alternative supply route and hence concluded an agreement with the
President Rahmon on “the land transit of goods such as construction
materials to support military operations of the International Security
Assistance Force (ISAF) in Afghanistan.” 28

Uzbekistan

In April 2009, Uzbekistan allowed the U.S. to transit its Afghanistan-
bound cargoes through its territory. 29 Uzbekistan is a key link in the NDN
as it shares borders with all of the Central Asian states. Robert Blake (U.S.
Assistant Secretary of State for South and Central Asia) during his visit to
Turkmenistan and Uzbekistan said that, “in the regional security field, Uzbekistan remains a valued partner for its participation in NDN and its role in Afghanistan reconstruction...Uzbekistan has facilitated transit for essential supplies to coalition forces in Afghanistan. Its national rail company, with funding from the Asian Development Bank, constructed an important railroad line that links the southern Uzbek city of Khairatton to the northern Afghanistan city of Mazar-e Sharif. The railroad will help boost trade between Central Asia and Afghanistan.”

Kazakhstan

NATO and Kazakhstan on January 27, 2010 reached on an agreement which “would allow the alliance to transport its Afghanistan-bound military cargo via the territory of the Central Asian state.”

Secretary General Anders Fogh Rasmussen on this occasion said that, “this allows supplies for our forces to start moving from Europe to Afghanistan, beginning in the coming days, complementing the very important transit route through Pakistan.”

Kyrgyzstan

Kyrgyzstan was the final state to approve the non-lethal ground transport agreement. Kyrgyzstan is already hosting U.S air base in Manas. The Manas air base had been playing an essential role as “the base has ferried troops and supplies to Afghanistan and provided in-flight refueling capability to coalition air operations against the Taliban.” By signing the NDN transit agreement in summer 2009, its importance has been increased tremendously.

Turkmenistan

Turkmenistan still holds its decision on Northern Distribution Network as it has not signed any transit agreement either with NATO or U.S. But the government in Turkmenistan permitted U.S. to use Ashgabat’s airport for refueling its military planes. However, negotiations are in process with Turkmenistan regarding its participation in NDN as transporting goods via Turkmenistan would cut the transit time and costs.

U.S. has secured same agreements with the other transit countries i.e. Azerbaijan, Georgia, Ukraine and Latvia.

The Northern ground line of communication i.e. NDN is divided into three branch lines. These are:
1. **NDN North**

This route starts from the Latvian port of Riga, the major port on the Baltic Sea. From there, it utilizes the available Soviet era rail lines to cross Russia, Kazakhstan, and Uzbekistan. From Uzbekistan the cargo then enters Afghanistan at Termez.

2. **NDN South**

NDN South transits the Caucasus and totally bypasses Russia. It begins at the Georgian port of Poti on the Black Sea and reaches Baku by traversing Azerbaijan. The equipage is loaded onto ferries to cross Caspian Sea. Once in Kazakhstan the material is laden on trucks to Uzbekistan and then proceeds to the final destination Afghanistan.

3. **KKT**

This course involves Kazakhstan, Kyrgyzstan and Tajikistan, which shares the northeast border with Afghanistan. This route is hindered by bad roads in Tajikistan which allows for only limited cargo transit.

The three branch lines of NDN play a vital role in supporting the reconstruction efforts and its capacity to serve as an east-west transit trade route is also of significant importance. In a broad sense NDN actually came forth in response to transport vulnerabilities and it is also a result of multilateral attempts to offer direct support to stabilization efforts in Afghanistan, politically and economically. These stabilization and reconstruction efforts are also a key to integrate Afghanistan into the international community.

The regional reintegration of Afghanistan into the international community has long term implications not only for Afghanistan but also for the neighbouring countries. Central Asian countries play an important
role “in connecting Afghanistan with markets, expertise, technology and cultural traditions that are critical in Afghanistan’s ascent from disastrous years of violent conflict.”

Map 2: Northern Ground Line Communication

One of the main factors that could affect the performance of NDN is the geopolitics of Central Asia. Each of the central Asian country has its own calculus for regulating and shaping the nature and level of its involvement in regional affairs. In addition, regional dynamics have their own role to play as well. The autocratic regimes in the Central Asian countries are also a destabilizing factor as in early 2009 U.S. faced Manas Airbase closure in Kyrgyzstan for a short time period.

Moreover, the complicated relations between the Central Asian countries is also a worrisome factor as at any point hostility between the countries could affect the NDN. Terrorist organizations operative in Central Asian countries could also pose a threat to NDN. The foremost challenge at the moment is the poor road and rail infrastructure especially bad roads in Tajikistan that contributes to limiting the output.

While shipping material through Central Asia, U.S. has to confront two big limitations i.e. first, only non-lethal material is allowed to be shipped for instance supplies are generally restricted to food, water, and
In order to strengthen the Northern Distribution Network, U.S. should take the following steps:

1. “Recognize that disputes within Central Asia could prove as great a threat to the NDN as disputes between transit countries and the United States and therefore take steps to minimize potentially damaging conflicts through diplomatic channels;
2. Use the NDN to push for streamlined customs procedures along Afghanistan’s border with Central Asia and, if possible, between Central Asian states;
3. Strive for maximum transparency in financial arrangements surrounding the NDN;
4. Draw up contingency plans for the reaction of Central Asian governments to possible militant attacks on the NDN and/or U.S. equities in the region;
5. Integrate as many locally sourced products as possible into the NDN in order to facilitate the development of greater sustainable cross-border commerce;
6. Clearly enunciate priorities and expectations with partner countries to avoid a repetition of past misunderstandings over competing aspects of U.S. policy, namely facilitation of operations in Afghanistan and reforms within Central Asia. Tension is unavoidable on this count, but clarity will make it easier to manage.”

**Implications for Central Asia**

Central Asia and Afghanistan share unique geography. Afghanistan lies at the crossroads of Central Asia. The geographical continuity, religious, ethnic and racial similarities have been a major factor in providing cross-border fraternization between the Central Asia and Afghanistan. Although, the impacts on Central Asian states of developments within Afghanistan is not as immediate as faced by both Pakistan and Iran, the Central Asian states remain vulnerable to instability in Afghanistan.

The Central Asian states might play a more active role in Afghanistan’s affairs, if the trade ties increases along the NDN. The establishment of Modern Silk Road (MSR) would be an opportunity for
the region to strengthen trade ties with other countries and international market. In addition to international trade, there is also a possibility that the degree of drug trade, human trafficking, and smuggling etc might also increase.

The flow of Afghan refugees to the Central Asian countries might also increase. Like Pakistan Central Asian states have also faced Afghan refugees’ problem. Turkmenistan, Tajikistan and Uzbekistan are the most vulnerable countries in this context as they share direct borders and also ethnic and racial affinity with the Afghanistan.

Central Asia due to its difficult terrain might be the next safe haven for the rebel groups and terrorist organizations. Moreover, the level of terrorism might increase in the Central Asian states as it is witnessed in Pakistan due to its active participation in combat terrorism operations and supporting U.S. and ISAF.

NDN provides great opportunities for the development of international trade. For instance, Uzbekistan’s promising steps of electricity sharing with Afghanistan could provide a template for improving relations with Tajikistan.

Stabilization of Afghanistan is not only important for Afghanistan but for the region as well. More integrated participation of Central Asian countries especially in economic development is vital for stabilizing Afghanistan and would profit both Central Asian countries and Afghanistan as well. To bring the Central Asian states into negotiations and giving them a clear position in ensuring regional security and stability, and especially Afghanistan’s stability would also be fruitful.

NDN apart from being used as a logistical supply route is also assisting U.S. to enhance its influence in the region to counter Russia. However, Russia’s active role in NDN and its participation in different counter terrorism tasks portrays Russia’s positive role in regional stability and also a healthy sign in U.S.-Russia relations.
Conclusion

The establishment of Northern Distribution Network (NDN) brought U.S. more closer to the regimes in Central Asia. Northern Distribution Network (NDN), the new transit corridor for the logistics is an alternative to the only route to Afghanistan through Pakistan that had been used for all type of military and non-military supplies to U.S. forces engaged in Afghanistan since 2001. To reach Afghanistan, a landlocked country, is a tough job for U.S. logisticians and they have only two possible routes to reach the war zone as hostile relations with Iran have blocked U.S and ISAF access through the west. The only routes available are either Pakistan or Central Asia.

Previously, Northern Distribution Network was viewed as an emergency back-up plan in the case if Pakistan’s routes became unavailable. But now a day after the Osama Bin Laden operation in Pakistan on May 2nd, 2011, U.S. has shifted towards the northern route. It is aimed to increase the flow of supplies by 75 percent via NDN by the end of this year. Though Northern Distribution Network have some vulnerabilities like poor rail links, and roads infrastructure but its success is affirmed.

In addition, Northern Distribution Network is fulfilling the tactical and strategic needs of U.S. as it is a network of routes to deliver non-lethal military cargo through Central Asia to Afghanistan. The two prominent challenges that U.S. faces while shipping the material through NDN are (i) only non-lethal and construction material is allowed and lethal material is prohibited and (ii) the one-way nature of the route as the material once shipped in the war zone cannot be shipped back.

Participation of Central Asian states in NDN would benefit the low-economic profile countries of Central Asia. As it gives an opportunity for economic development and economic growth and in addition would also strengthen the U.S. and Central Asian Countries relations. Also gives an opportunity to U.S. to enhance its influence in the region to counter Russian influence.

In addition, Russia’s active participation in efforts combating war against terrorism and establishing peace in Afghanistan would enhance Russia’s role worldwide. Stabilization of Afghanistan is also as important for Russia as it is for U.S. and the region.
NDN outside the U.S. designs i.e. to use it for logistical support; gives a great opportunity for the economic development, and the development of international trade. It would also help in strengthening regional relations and stability.

Notes & References

4 Ibid.
5 Ibid., p. 6.
The Afghan war: U.S. transit reliance on Pakistan and its search for alternatives

23 Ibid.
32 Ibid.