ANNEX III

Project Selection and Prioritization

Including Recommended Priority Regional Projects

[Selection criteria still to be compiled]

To improve the state of physical transport infrastructure (roads, rail, border-posts, ports) along the North-South Corridor and the regulatory environment for trade and transport (i.e. by simplifying and reducing cross-border clearing procedures, harmonising transit and transport regulations, and simplifying administrative requirements, etc.). Expected benefits are to reduce the time, and the costs, of road and rail transport along two priority Corridors traversing the southern and eastern Africa regions.

The North South Corridor system, with its spurs, service eight countries – Tanzania, DR Congo, Zambia, Malawi, Botswana, Zimbabwe, Mozambique, and South Africa

The NSC represents a total capital expenditure cost of US$7950m, made up of projects falling in four main categories of interventions.

Trade Facilitation projects are estimated at US$ 20.35 million over a 5 year period1 covering targeted interventions to improvement and harmonisation the regulatory framework.

Road projects cover around 4000km of infrastructure at differing levels of condition and requiring different levels of investment to improve and sustain it. There are some sections where feasibility and design studies need to be completed, whereas other sections require financing for construction. The total financial investment required for road network improvement on the NSC, excluding South African roads, to bring the whole network to a good standard, and maintaining it at that level for 20 years was estimated at US$ 9.8 billion2, of which US$6.4 billion is capital expenditure. The total estimated financial requirement for border posts improvement is US$0.7 billion of which US$0.3 billion is capital investment and US$0.4 billion is recurrent costs.

Rail projects focus on more than 600 kilometres of back-bone rail systems along the Corridor, essentially the NS railway system from the South African border, through the Copperbelt to the DRC, and the rail system feeding the Port of Dar-es-Salaam. The estimated investment cost comprising both soft and hard projects is US$ 807 million over a 5 year period.

Regional Ports include the main international sea ports of Dar-es-Salaam in Tanzania, and Durban in South Africa, but also Nacala on the eastern coats of Mozambique. All ports suffer from congestion and berthing delays, mainly linked to capacity problems of their respective container terminals. The estimated investment requirements over a 4 year period for both soft and hard projects are US$ 429 million.

[1] NSC Pilot Aid for Trade Programme, Surface Transport Report, 2009
[2] NSC Pilot Aid for Trade Programme, Surface Transport Report, 2009

The North South Corridor (NSC) is a joint COMESA-EAC-SADC Aid for Trade initiative. Its primary aim is to reduce the time and reliability, and so the costs of transport along two priority Corridors traversing their regions and supported by NEPAD. The NSC covers the Dar-es-Salaam Corridor, which links the port of Dar-es-Salaam to the Copperbelt (Southern DR Congo and Northern Zambia) and the North South Corridor, which links the Copperbelt to the southern ports of South Africa specifically the port of Durban. In addition, a spur adjoining the NACALA Corridor to the Port of Nacala on the Indian Ocean, along Mozambique's eastern Coast also falls within the broader definition referred to as the North-South Corridor.

In order to promote inter-Regional Economic Community (REC) coordination, in terms of joint planning, resource mobilisation and programme/project implementation COMESA, EAC and SADC launched in October 2008 the Tripartite Arrangement, which currently describes the vision and regional objectives of its Southern and East African Member Countries. The Tripartite subsequently decided to initially concentrate on coordinating and harmonising programmes in trade, trade facilitation and infrastructure and, as such it established sub-committees on trade and infrastructure. The flagship programme for the Infrastructure Sub-Committee has been the design and roll-out of the NSC Pilot Aid for Trade Programme.

A High Level Financing Conference was held in Lusaka, Zambia in April 2009 attended by four Heads of State and most major IFIs. At this conference, pledges of US$ 1.2 billion were made specifically to the NSC projects, including other non-specific pledges. The UK government is supporting the NSC through its TradeMark South Africa programme, AfDB has committed US$600m to implementation, along with other partners.

A Tripartite Trust Account housed at the Development Bank of Southern Africa was established in May 2010 with UK government support. This is able to accept funding from Development Partners and can be used to finance identified projects and programmes needed to make the transport corridors in eastern and southern Africa, including the NSC more efficient. In addition a number of priority projects, including the Chirundu One stop Border Post on the Zambia / Zimbabwe border have been completed, with positive trade and integration impacts.

In June 2010, President Zuma, of South Africa launched the Presidential Infrastructure Championing Initiative (PICI) aimed at providing political leadership to delivery of regional projects. South Africa has agreed to Champion the NSC and drive forward delivery of a priority road and rail project.

G20 support would provide strong political backing for the NSC being championed by South Africa, and leverage the necessary legal and regulatory reforms required to improve trade and transport facilitation in the region. In addition G20 members can lend direct support to help bridge the financing gap on

priority projects through direct financing, contribution the Tripartite Trust Account of in other ways to facilitate financial close.

To improve access clean and reliable renewable Energy from Ethiopian hydro and geothermal resources from Kenya. Expected benefits will be to provide East African countries with cheaper, cleaner and more reliable power reducing persistent load shedding, which is having negative effects on industrial output, agricultural and commercial operations as well as the general administrative and organizational activities of the countries in the region.

Ethiopia and Kenya, but by extension to countries in the East Africa region.

The project cost is estimated at just over US$1bn. Phase 1 costs are around US$775m and Phase 2 costs US$263m. further expansion to eastern Africa markets is also foreseen in later phases.

The project will interconnect the power systems of Ethiopia and Kenya via a high voltage transmission line starting from Wolayta Sodo on the Ethiopian side and ending in the Isinya substation in Nairobi, on the Kenyan side. The line is designed for maximum transfer of 2000 MW of power. The project entails construction of +500 kV DC transmission line to cover a distance of up to 1,200 km. and associated substations. It is of regional importance as it seeks to make efficient and reliable use of the hydropower resources in Ethiopia and geothermal resources in Kenya.

The project will comprise of two phases as described below:

Phase 1: This phase will allow transfer of 1000 MW between Ethiopia and Kenya up to year 2020 and will consist of transmission lines, substations and project management and supervision.

Phase 2: This phase will upgrade the transfer capacity of the interconnection to 2000 MW from the year 2020 up to 2030 which is the planning horizon.

The project's feasibility study has been completed - it was carried out by Fitchner. Additional environmental studies on the hydropower plant linked to the transmission line have been requested by MDBs. These have been completed. Construction would be complete by 2013. Power through this interconnector would also be available to other east Africa countries including DRC, Burundi, Rwanda, and Uganda. Interconnection with the Southern Africa Power Pool will also be possible after implementing the Kenya -Tanzania interconnection project. Further work is required on the legal and regulatory environment for effective future power trading markets.

G20 support will enable the necessary legal and regulatory reforms required to develop an effective power trade market for eastern Africa, in addition to targeted capacity development of key institutions to support this. In addition, there may be scope for G20 members to provide finance or guarantees for future expansion of the network.

To support the optimal phasing of the Inga site hydroelectric development, with the objective of developing its full potential over time, both for DRC consumption and for energy export to African countries. This will provide DRC and other countries with cheaper, cleaner and more reliable power supply to support industrial output, agricultural and commercial operations.

Democratic Republic of Congo, with links to regional power pools and Continental benefits

To be determined

The Inga site's potential is close to 40 000 MW, yet current installations capture only a fraction of this potential. Just 1,775 megawatts of power generation capacity has been installed and only a small fraction of the turbines currently operate. Development of the Inga site would include expanding installed hydropower capacity, developing necessary transmission back bones, as well as strengthening the quality of the legal and regulatory framework of the energy sector to secure private sector participation in the financing, implementation, operation and maintenance phases of this transformational development.

An AfDB funded study was launched in March 2011 to assess options to optimize the development of full potential of the Inga site. By September 2011 the study will produce updated pre-feasibility analyses comparing the proposed Inga3 project and the first phase of Grand Inga. These pre-feasibilities will enable the Government of DRC (GoDRC) to make an informed decision about which option should be undertaken as the next logical development on the Inga Site.

Development of Inga is a potentially transformational project, but one that also presents complex political, institutional, technical and financial challenges. G20 could add value to this project with high level backing to drive forward the optimal phasing of the Inga site hydroelectric development, with the objective of developing its full potential over time, both for DRC consumption and for energy export to African countries. In addition, G20 support would add value to the process required to implement the necessary legal and regulatory reforms, as well as institutional capacity building both in DRC and regionally to facilitate project development through a PPP model. There may also be opportunities for downstream financing of capital investment or for the provision of risk mitigation guarantees, for those G20 members who would be interested.

[Selection criteria still to be compiled]

1. Regional work toward establishing a pan-Asian transport network traces back over 50 years—to the late 1950s—when the development of the Asian Highway (AH) and Trans-Asian Railway (TAR) was first broached by the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP). Although there are many programs and issues associated with the regional connectivity, the two programs (AH/TAR) have made significant contributions—with a combined length of over 250,000 kilometers of roads and rails—and their links between capital cities, major commercial centers, industrial parks and export processing zones, as well as ports.

2. Though nowadays, ADB is heavily involved in this regional connectivity, both the AH and TAR were UNESCAP initiatives, which began identifying routes for an AH network as far back as the late 1950s. Links for a TAR network were identified beginning in the 1960s. In 1992, UNESCAP initiated the Asian Land Transport Infrastructure Development Project comprising the AH and TAR networks aimed at improving regional transport and cross-border connectivity.

Source: ADB TA-7557

3. Regional infrastructure development provides important benefits for reducing poverty and income disparity in the region. Indeed, Asia and the Pacific has experienced rapid economic growth and made impressive gains in reducing poverty. Yet, a recent joint report ("Path to 2015") by UNDP, UNESCAP, and ADB (2010) on the Millennium Development Goals (MDGs) shows that additional work is required. One specific finding is that inadequate infrastructure continues to be one of the main constraints for growth and development in the region, and represents a key barrier against the common

roads (Figure 1), passing through 32 member countries in the Region. ADB had financed almost 18,000 km, or about 18 % of the network length in ADB's developing member countries (106,000 km). Key project pipelines include, where appropriate.

Connections to main industrial and agriculture centers,
Connections to major sea and river ports,
Connections to major inland container terminals and depots,
Connections to major tourist attractions, and
Connections from capital-to-capital cities

Prioritized AH projects: In 2006, UNESCAP identified 121 AH priority improvement projects covering nearly 26,000 km at an estimated cost of $18 billion. Infrastructure for a Seamless Asia (ADB and ADBI, 2009) lists these projects as "Unmet Investment Needs for Asian Highway Identified Projects." In 2010, UNESCAP updated these priority projects. The latest list retains earlier projects and adds additional routes.4 The revisions create 190 priority links totaling roughly 35,000 km at an estimated cost of $31 billion. Of the total, nearly 32,000 km (179 links)—estimated at $29 billion—are in ADB's DMCs.

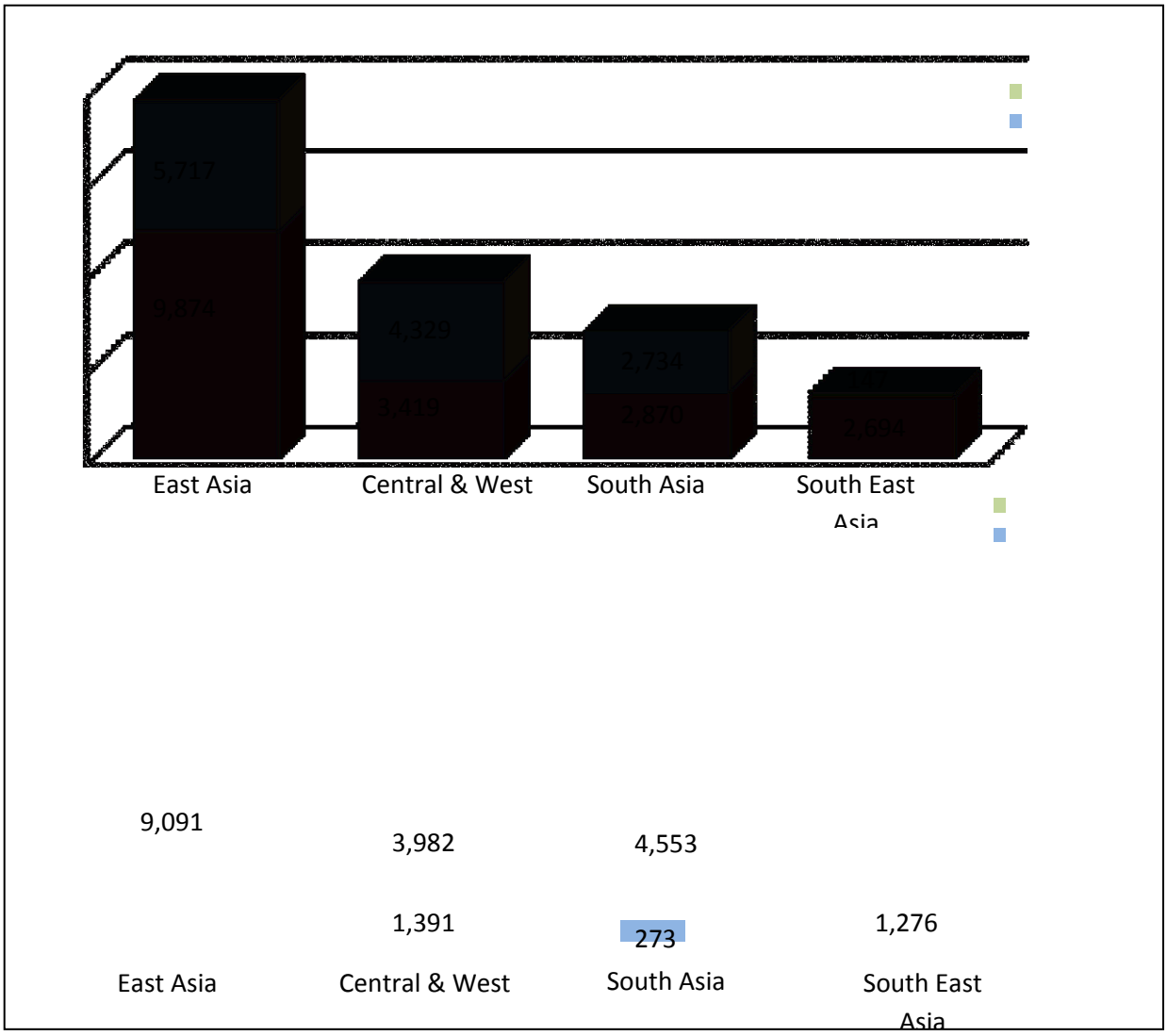
8. Trans-Asian Railway (TAR): The TAR was designed as a corollary to the AH. UNESCAP initiated the TAR network in the 1960s with the objective of providing a continuous 114,000 km rail link between Singapore and Istanbul, connecting capitals, industrial centers, and ports in 28 member countries. The TAR promotes railways as an energy efficient mode of transport that enhances climate-friendly, operational efficiency, economic relevance, and commercial use of Asia's rail transport infrastructure. An Intergovernmental Agreement signed by 22 countries adopted the TAR network in 2006 as a key to fostering regional integration. 5

Prioritized TAR projects: In 2010, 69 priority projects were identified covering roughly 24,000 km for the TAR. Of these, almost 15,000 km (45 links) are located in ADB's DMC's with projected investment requirements of $36 billion.

9. The current priority AH and TAR projects is still being developed by ADB and UNESCAP, and has been analyzed in close collaboration with UNESCAP (Figure 2). The priority results highlight the importance of external assistance, in which ADB has played a major role, in highway development. The

lower costs compared to the TAR), it should not detract from the potential contribution that improved and competitive railway systems can make to regional transport as key links in a multi-modal system.

10. The projects have built-in flexibility where PPP can come in any of the AH segments, particularly if it is within a country, as there are considerable ease of project management with one country. In addition, the potential for attracting private investment will be also enhanced by the cooperation among countries, as it will increase the possibility of higher traffic volume and viability of individual project through such a AH segment linkage.



Source: UNESCAP and ADB TA 7557 Estimates

11. Given the magnitude of the finance required, there has been considerable progress in implementing the AH. Almost 60% of priority projects have been financed. Around $6.7 billion is still required for financing the remaining 40% (this is an estimate compiled by member country projections;

actual amounts could be much higher). The priority lists are based on original submissions by national authorities. The criteria adopted by UNESCAP to select AH links were consistent with those used for identifying national priority projects.

12. The situation for the TAR is very different with only about 11% financed (mostly in Central and West Asia). The remaining 89% of priority projects is estimated to cost at least $35 billion. The imbalance between sub-regions in TAR prioritization needs to be addressed. The lower overall lending to railways is associated with (i) technical and engineering specifications on the width of railways are different by sub-region (or some countries), which causes difficulties for cross-border connections, and (ii) regulations and standard procedures of operating railways add more complexity of connections compared to regional highways.

1. Turkmenistan is the independent, neutral, dynamically developing state that has advantageous of possessing a considerable mineral raw material resources, industrial, economic and personnel potential. The basis of Turkmenistan economy includes electric power industry branches, oil and gas production, oil refining, chemistry and petro-chemistry, the industry of building materials, the textile and food industries. Turkmenistan has the 4th largest natural gas reserves in the world after Russia, Iran and Qatar. Due to its geographical position, Turkmenistan has experienced difficulties in the past to bring natural gas to the world market. Historically, Russia has been the main buyer of Turkmenistan's gas via its Soviet era infrastructure, which was the only available outlet. As a result, Turkmenistan's ability to negotiate the prices has been highly constrained. If its natural gas/oil export channels remain limited, the economic prospects of the country in the near future are discouraging; Turkmenistan's widespread poverty incidence is about 40% (at $2.0/day, 2009); the high burden of foreign debt and limited access to international market to capitalize its endowed natural resources, i.e., gas and oil. In an attempt to diversity its market, Turkmenistan adopted a policy to supply gas to anyone prepared to construct a pipeline to its border.

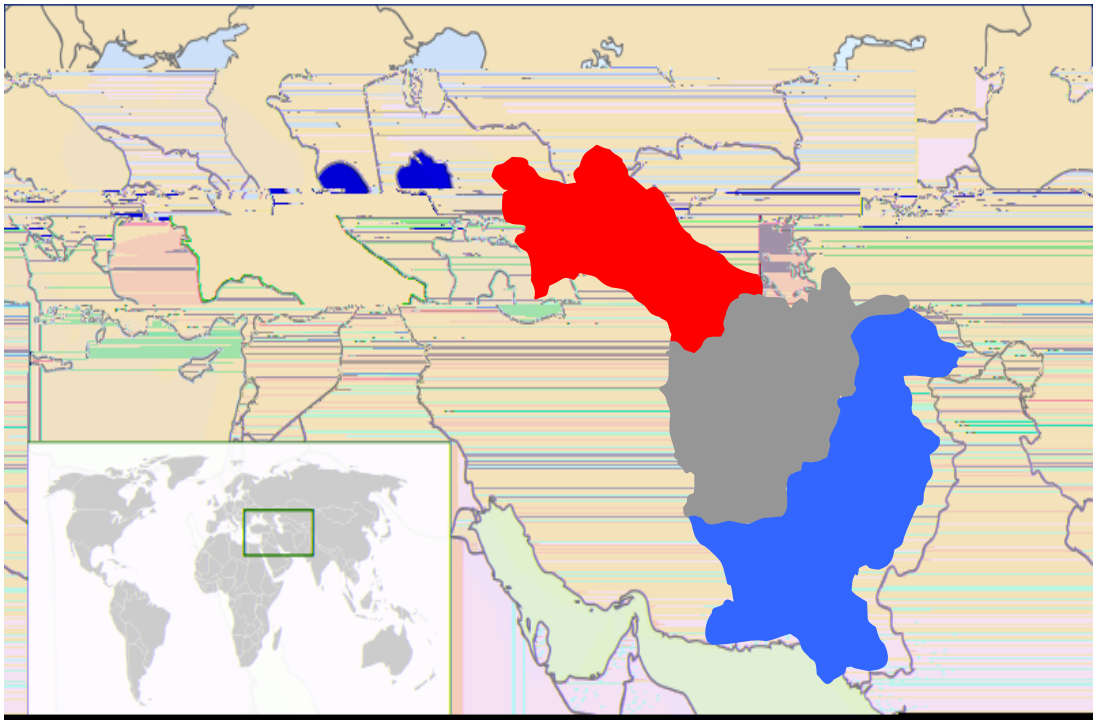
2. Built during the Soviet era, the country had relied on old export gas pipelines with a total exporting capacity of 60 billion cubic meters (bcms) a year; The Central Asia-Centre Pipeline, handles 45-50 bcms. Most of this gas is bought by Gazprom. The first regional connection, Turkmenistan-Iran pipeline, was built in the late 1990s. The 75-kilometer pipeline has a capacity of 7.5 bcms. On 6 January 2010, the New Turkmenistan-Iran pipeline began operations. In Turkmenistan territory, the pipeline is 30.5 kms long with a 12.5 bcm capacity of gas a year. Together with the first Turkmenistan-Iran gas pipeline, the new one (Dovletabat-Sarakhs) will export up to 20 bcms a year.

3. Turkmenistan signed an agreement with China in April 2006 to supply 30 bcms of gas a year via East Pipeline (the second regional connection, also known as Turkmenistan-Uzbekistan-Kazakhstan-China Pipeline). In December 2007, PetroChina extended $2.2 billion towards this investment. The pipeline, 1,818 kms long, was completed on 14 December 2009, and became operational in 2010.

1. The country pursues a flexible approach in dealing with gas buyers. It wants to diversify gas exports and expand capacity from 90 billion cubic meters (bcm) to 200, by 2020. Turkmenistan is currently actively pursuing financing of gas pipelines; Turkmenistan-Afghan-Pakistan pipeline (TAPI). This is at the center of the diversification plan. ADB financed its feasibility study and several technical assistances for legal and program coordination services. The expected capacity is 90 MMCMD.

2. Turkmenistan-Afghanistan-Pakistan-India (TAPI) Natural Gas Pipeline aims to supply gas from Yolotan-Osman gas field in Turkmenistan to buyers downstream via approximately 1,800km long pipeline. A commercial sponsor will be sought by the countries to lead the pipeline consortium.

3. Gas Pipeline Framework Agreement (GPFA) and Inter Government Agreement (IGA) were signed at TAPI Summit of Heads of State/Government in Ashgabat in December 2010. Asian Development Bank has been supporting this project since 2002.



4. What TAPI Mean to the Parties
   - Longer term energy security and economic growth for the Buyers:
     Pakistan: meet part of demand for power plant fuel and gas to augment depleting domestic gas
     Afghanistan: fuel source to develop southern area
     India: least cost gas (climate friendly) for northern part and diversification from domestic coal
   - Unprecedented regional cooperation (improving sub-regional trading volume)
   - Regional peace and security
   - Gas export diversification for the Seller (Turkmenistan)

5. Current Status
    - Government level agreements signed in December 2010
    - All Parties are fully committed
    - Gas Sales and Purchase Agreement being negotiated
    - Commercial party to lead the pipeline consortium will be sought by the Parties

6. The updated feasibility study in 2008 estimates the total cost of the TAPI project at US$7.6 billion. The TAPI financing is expected to come from international and domestic banks including potentially ADB and investments from commercial sponsors and from the state owned enterprises.

7. Expected Benefits
    - Formation of the reliable infrastructure which enables uninterrupted delivery of natural gas, as a matter of fact, acts as a backbone element of energy security in the Central West Asian Region. Therefore, gas pipeline projects TAPI carry special importance. When completed, the network will link West-Asian 4 countries (Turkmenistan , Afghanistan at 90%, Pakistan at 47%, and India at 64%, 2009), particularly benefitting many low income countries for economic development.
    - This program is expected to strengthen the position of the country in the international markets, by constructing sufficient quantity of infrastructural branches, diversifying its economy, and refining sectoral and organizational-economic structure of economy.
    - Considerable stocks of oil and gas, located on a Turkmen territory of Caspian Sea, demand large investments into their working out, extraction and connectivity of oil/gas pipelines to transmit for A-P-I countries. Examples of foreign partners working in this region testifies a very fast cost recovery of the investments.

[Selection criteria still to be compiled]

1. The Pacific Corridor (CP) starts in the city of Puebla (Mexico), and follows the coastal route parallel to the Pacific Ocean until Panama City, covering a total area of 3,244 km.

2. The CP is the shortest route and the one at a lowest average altitude above sea level between Puebla and Panama City, thus, becoming the most efficient integration corridor for Mesoamerica. The CP crosses 7 countries and is used by 95% of regional land freight.

3. The CP project will accommodate the rapid growth of intra-regional exports, which grew by 63% between 2004 and 2009 (U.S. $ 10B)

4. Current Issues:
   - Sub-optimal infrastructure conditions: Geometric design, traffic signaling, pavement condition, service level
   - Average corridor speed is only 17 km / h (11 mph)
   - Inadequate border crossing infrastructure and inefficient customs processes
   - Inexisting integration for logistics operations
   - The Mesoamerican region has a high number of road incidents (20,000 dead/year)

5. : Recommending a group of studies for project preparation (financed through US$ 2M+ in technical grants)
   - Road network: Collected existing data and divided of the project in homogeneous sub-sections; developed studies related to investment planning for each sub-section and; prepared bidding documents for sub-sequent studies
   - Border Crossings: Proposal to optimize border crossings by defining the most appropriate control procedures and by proposing necessary infrastructure interventions in the crossing and the access roads

6. : Based on the technical standards defined by the International Network of Central-American Highways (RICAM).
   - Road improvements (rehabilitation, capacity improvements) in 1,836 km.
   - Infrastructure (access, facilities), control systems and improved customs processes in 6 border crossings
   - Design of a comprehensive program to address road safety.

7. : Institutional, technical and financial project structuring (to be presented in the X Tuxtla Summit 10/17/11)
   - Design or alternatives for institutional, regulatory and administrative mechanisms for project implementation
   - Design of a financing strategy (public finance, PPP, other sources) for each component

- Design of a technical strategy (e.g. engineering studies, socio-environmental assessments, country responsibilities) for project implementation
- Socialization and consultation of the proposals with stakeholders in the region

[Selection criteria still to be compiled]

1. MENA countries are embarking on scaling-up concentrated solar power (CSP) investment programs to reduce their current consumption of oil and gas in the power sector as well as for export of solar energy to their European neighbors. Moreover, the CSP development is motivated by objectives of employment creation, climate change mitigation, regional integration, and energy security through development of indigenous solar renewable energy resources. These objectives have been reflected in the Mediterranean Solar Plan and Desertec Industry Initiative.

2. CSP has the advantage of being fully available during daylight hours without significant intermittence, and increasingly at night also through utilization of heat storage technologies currently being developed. Currently, the scale-up of CSP is being supported in five MENA countries (Morocco, Algeria, Tunisia, Egypt and Jordan) by a multi-donor group: AfDB, World Bank Group, IsDB and EIB, as well as Japanese and European donors. Catalytic funding is being provided by the highly-concessional Clean Technology Fund (CTF), and private investment is being mobilized in partnership with the public sector. The package includes about 1200 MW of CSP generation and also cross-border interconnections for export, to a total estimated cost of $5.6 billion.

3. Based on a demonstration of commercial viability, MENA could become home to a new, high potential "Green" industry in a region with large solar energy resources. If the CSP market increases rapidly in the coming years, the region could benefit from significant job and wealth creation as well as from sufficient power supply satisfying a growing demand, while the world's RE sector would benefit from increased competition and lower costs in CSP equipment manufacturing.

4. MENA CSP is central to the high-level political agreement pending between MENA and the European Union to make solar energy trade a fundamental pillar of MENA-EU economic integration, and therefore presents a major opportunity for MENA to earn export revenue. MENA CSP could be central to the realization of the EU's GHG emissions reduction and energy security objectives. The April 2009 EU Renewable Energy Directive, with its provisions for the import of renewable energy to achieve the mandatory renewable energy targets of EU member states, is a first step in that process.

5. A demonstration of economic viability and access to EU's profitable markets will be essential to the take-off of CSP in the MENA region. The former will be achieved if the private sector shows its willingness to make investments without further public support beyond the concessional catalytic funding being provided, for example by CTF. The latter will require regulatory framework support to allow access to imports of CSP energy from MENA on terms equivalent to those provided to EU producers and some transmission investments which can be realized with the assistance of the G20 in close partnership with the MDBs. G20's leadership to facilitate the MENA solar scale-up initiative will have a powerful and immediate demonstration effect

throughout the region, and indicate the G20's willingness to facilitate access to important lucrative markets to create much-needed employment and revenue generation opportunities in MENA to support the region’s economic development.

1. The Kingdom of Jordan is planning to develop a new railway network which will connect major centers, ports and entry points within Jordan. The project will also integrate Jordan with its neighbors in the region (Syria, Saudi Arabia and Iraq). Once completed, the project will also connect Europe through Turkey with countries of the Gulf Cooperative Council. Estimated total length of the new proposed railway track is 1,080 km.

2. The Government of Jordan, using its own financial resources, has already completed the full bankable feasibility study including the project design. An infrastructure company (wholly owned by the Government) know as 'Jordan Railway Company, JRC' has also been established. Required laws and regulations have also been put in place, effectively making the project ready for tender.

3. The capital investment for the overall network is estimated at US$ 5.0 billion. The estimated total cost of infrastructure is US$ 3.8 billion. An amount of US$ 3.4 billion is envisaged to be financed through public sector debt and remaining US$ 0.4 billion is expected to be financed by the Government of Jordan. The Government of Jordan plans to finance the program in a phased manner as follows:

    - includes construction of the North West/South East corridor linking Syria to Zarka/Amman and to Kingdom of Saudi Arabia;
    - will extend the network to the Red sea port of Aqaba;
    - will extend the network to the borders with Iraq

4. The major impacts to be derived from the implementation of this project include the following:

    - Enabling Jordan to benefit from its strategic location to become a major transport, logistic and trade service provider
    - Fostering regional cooperation, trade and transportation facilitation, regional inter-connectivity and acceleration of economic growth
    - Reducing the transportation costs to increase the industrial competitiveness
    - Providing a land bridge connection between European railway network and the Gulf railway
    - Reducing road cargo traffic as well as associated congestion, accidents and air pollution
    - Creation of new employment opportunities

5. World Bank, IsDB, EIB, AFD, JICA, Arab Fund, Saudi Fund, Kuwait Fund, and Abu Dhabi Fund have already expressed interest in financing the Project. Currently, the Government of Jordan is unable to provide sovereign guarantee for the total proposed financing amount. Thus, G20 can lend its support by providing the needed guarantees as well as bridging the financing gap, as needed, to facilitate the financial closure and initiation of the project implementation at the earliest possible.

1. Rigorous project screening will continue to be an important taks for regional countries and MDBs. Many criteria can be used for project assessment. One proposal, for example, could be to screen projects using five scoring criteria supplemented with social and environmental considerations, such as the greenness of projects:

   - gauges the extent to which the project brings about regional integration; the larger the geographical reach, the higher the score.

   - documents to what extent the project has been officially endorsed by regional political forums.

   - captures the magnitude of the potential development impact of the project once completed.

   - indicates how far along the project is in preparation, including pre-feasibility study; a score of 4 indicates a World Bank Board date of 2012.

   - indicates the relative ease of implementation based on various institutional challenges.

   - – All criteria are scored on a scale of 1 (minimum) to 5 (maximum). An illustrative total score is provided by summing all criteria with equal weight; other weighting schemes could be adopted.

2. In addition, the following information can be used to assess the priority of projects:

   - estimates the funding shortfall for project preparation needs, such as feasibility studies.

   - estimates the funding shortfall for project capital needs.

- The North-South Corridor is the main transport artery in southern Africa, supporting some US$80 billion of exports and US$5 billion on intra-regional southern African trade.
- The corridor suffers from some 1,100 (2,000) kilometers of deficient road (rail) infrastructure; which are the principal “missing links” of integration in the sub-region.
- Lengthy border delays mean a road journey from Lusaka to Durban takes 8 days (half at borders). Delays cost US$170 million annually and slow freight velocity to some 10 km/hr.
- The North-South Corridor Project aims to upgrade defective road links and promote adoption of modernized one-stop border crossings to tackle frontier delays.
- Corridor improvements benefit the 40 million people that live in the five landlocked countries along its length (Botswana, Malawi, Zambia, Zimbabwe and southeastern DRC).
- High transport costs raise goods prices by 75 percent; and stymie exports – the cost of exporting a 20ft container is US$2,800 (US$1,300) in landlocked (coastal) countries.

- The Inga site on the River Congo in DRC stands out as by far Africa’s largest and lowest cost hydro-power site, capable of generating electricity at around US$0.02-0.03 per kilowatt-hour.
- Estimated potential capacity of 40GW would more than double existing SSA capacity (excluding South Africa); Inga 3 represents the next developable tranche of 4GW of capacity.
- Power from Inga 3 would be exported into the Southern and Central African Power Pools, significantly reducing power costs in seven countries with a total population over 90 million.
- In addition, this power could pave the way for potential major industrial development in Bas Congo, identified by NEPAD as one of the highest potential development corridors in Africa.

- Many West African countries face very high costs of power, ranging from US$0.20 to US$0.40 per kilowatt-hour; or at least four times the cost in other developing regions.
- Yet West Africa has abundant hydro-power resources and gas reserves that could substantially reduce power generation costs to US$0.06 to US$0.08 per kilowatt-hour.
- The CLSG project will develop 1 GW of cost-effective hydro-power and provide interconnections to Liberia and Sierra Leone; potentially benefiting some 8 million people.
- Cheaper power is known to have a significant impact on the productivity of businesses as well as improving the quality of health and education services.
- More affordable electricity is also the starting point for raising household access to power that today stands at around 13 percent in Sierra Leone and close to zero in Liberia.