ESIA Process, Conclusions & Recommendations

24 September 2015

Bill Wild
Chief Project Advisor of HKND
ESIA PROCESS

- Terms of Reference established by MARENA
  - Project to comply with International Good Practice, specifically the Equator Principles

- ERM applied a “mitigation hierarchy” in evaluating the Project
  - Emphasizes avoiding and minimizing impacts before considering mitigation or offsets
  - Three categories adopted to measure and manage impacts – embedded controls, mitigation measures and offsets
MITIGATION HIERARCHY

- Embedded controls are incorporated in the design to avoid or minimize impacts
- Mitigation measures adopted to avoid & minimize impacts
- Offsets are a last resort to compensate for residual impacts
- A “HKND Commitment Registry” is included in the ESIA
The main conclusions were grouped under 3 headings

- Route Selection
- Conformance with International Standards
- Cost Benefit Comparisons
After rigorous comparison of the 6 main alternative routes, Route 4 was considered the only one with the potential to adequately mitigate/offset negative impacts and meet International Standards.

Many alternatives within the Route 4 Corridor were considered.
ROUTE SELECTION (con’t)

- A major consideration in the selection of Route 4 was its ability to contribute positively to the protection of the threatened Environmental Reserves, especially those on the Caribbean Coast.
- Funding/coordination required to assure
  - restoration and permanent enforcement of designated protected areas, and
  - agreed environmental and social mitigation and offset measures
Many aspects of the Project meet international good practice standards

Some aspects of the Project require further work to meet International Standards

These are identified and necessary further studies are listed

Eg: East Lock and Lake Atlanta options need further study
Continuation of current environmental trends is “not positive by any measure” due to ongoing deforestation & lack of development opportunities.

Many of Nicaragua’s Environmental Reserves are only “Paper Reserves”. Degradation occurring at an ever increasing rate.

Current rates of deforestation and encroachment mean the eventual loss of Indio Maiz and MBC and major implications for biodiversity, natural resources, ecosystem and tourism.
COST/BENEFIT COMPARISONS

- Canal development in accordance with International Standards “could offer the best future for Nicaragua .... could provide environmental, social and economic benefits to the people”
- Panama Canal is a good example of the economic and environmental benefits a well-executed canal can deliver

- In the “NO CANAL” scenario, employment opportunities will stay limited.
- Subsistence-style farming and “slash and burn” clearing of forest will continue
SUMMARY OF CONCLUSIONS

➢ Project offers potential benefits to the environment and people of Nicaragua
➢ Delivering the benefits requires a robust business case and secure financing to completion
➢ Project must be constructed and operated to International Standards and all of HKND’s commitments defined in the ESIA must be fully realized for benefits to be achieved
OVERALL ESIA OUTCOME

- ESIA does not recommend or oppose Project; that is a decision of Government
- ESIA describes likely environmental & social effects of construction & operation of the Canal
- Project would result in significant environmental and social impacts
- Project also has potential for positive effects if properly implemented
RECOMMENDED ACTIONS IF PROJECT IS APPROVED

- Robust ESIA disclosure and public briefings so the community understands the Project and its effects
- Confirmation of preliminary technical conclusions by further studies
- Continue design optimization process to improve outcomes
- Subject the final design to Expert Review
- Ensure proper Project governance
RECOMMENDED ACTIONS – ESIA DISCLOSURE

- Extent of stakeholder engagement and publicly available information to date has been criticized
- Additional engagement with affected people and interested parties about the ESIA is recommended
RECOMMENDED ACTIONS – CONFIRMATION OF CONCLUSIONS

- Preliminary analysis indicates that canal as designed would be safe and Lake de Nicaragua adequately protected
- Most of the impacts are reasonably well defined and quantifiable
- Additional studies to be completed to reduce uncertainty with some conclusions and to confirm preliminary conclusions
- Studies to be completed before final design approval and commencement of construction
  - Topography survey
  - Geotechnical & seismic risk assessment
  - Acid Rock Drainage potential
  - Lake de Nicaragua sediment study
  - Lake de Nicaragua bathymetry study
  - Water balance & salinity study
  - Archaeological study
RECOMMENDED ACTIONS – OPTIMISE PROJECT DESIGN

- Proposed route is the preferred route, taking into consideration economic feasibility and environmental and social risks
- Some optimization already undertaken at increased Project construction cost in order to avoid/reduce environmental/social impacts and to minimize environmental and social risks (e.g. at El Tule)
- Additional optimization recommendations
  - Move West Canal Pacific Entrance another 200 metres south (accepted)
  - Move East Canal Caribbean Approach slightly to the north (accepted)
  - Optimize EMPA’s to minimize environmental and social impact (accepted)
- Further optimizations to be considered
  - West Canal alignment (will be considered based on further studies)
  - East Canal Lock (location and design of East Lock and Lago Atlanta to be reviewed)
  - Relocate some port facilities from Point Aguila to Lake Atlanta
RECOMMENDED ACTIONS – OBTAIN EXPERT REVIEW

- Segments of the project are located in seismically active, remote, and/or high precipitation areas, rich in bio-diversity and a critical source of fresh water.
- Project failure would have significant consequences.
- Establish an international Expert Panel to review engineering design and constructability.
PROJECT GOVERNANCE

- All recommended mitigation and offsetting measures should be implemented
- Some issues and mitigation measures go beyond the legal authority of the Project Sponsor. Successful implementation requires coordinated effort
- Government of Nicaragua roles and responsibilities
- HKND is a Special Purpose Vehicle. Needs to expand its capacity to manage the project and implement environmental and social commitments
  - Organization structure
  - International technical experts
  - Establish an Environmental and Social Management system
- Conditions of Approval
Thank You!

We are Satisfied