



Netherlands Commission for
Environmental Assessment

Why Strategic Environmental Assessment?

Two case examples:

- Mining: The ‘Uranium Rush’ in Namibia
- Infrastructure: North–South corridor in the Greater Mekong Subregion

Roel Slootweg

SEA for Uranium mining in Namibia

- World market for uranium favourable
- ‘Scramble’ for exploration licenses: 36 in Erongo region (all subject to separate EIAs)
- No coherent development vision for this region
- Result: Ministry of Mines and Energy put a moratorium on mining licenses and called for an SEA
- Question:
 - How can authorities and other stakeholders best manage the “Uranium Rush”
 - How to ensure that uranium mining contributes to sustainable development of the region





Erongo region: coastal desert area with temporary rivers, important for:

- Biodiversity conservation; tourism; livestock; mining; archeology; train and road transport; harbour facilities.



SEA: Potential benefits of mining

- Increased government revenues / foreign reserves
- Economic stimulus to Namibian economy
- Employment & skills development
- Infrastructure development / upgrading
- Social, environmental and economic development
- Upgrade of health facilities
- Namibia's international reputation on sustainable development



SEA: Potential (cumulative) constraints

- Impacts on water (availability)
- Impacts on biodiversity and heritage (archeology)
- Impacts on health (e.g. radiation)
- Impacts on tourism and recreation
- Stress on physical infrastructure
- Impacts on towns and social structures
- Stress on government ministries



ToR for SEA

- Develop / assess scenarios of mining and associated developments as a basis for decision-making and planning.
- Recommendations on sustainable mining in Erongo Region.
- Provide solutions on (cumulative) impacts and challenges stemming from the mining operations.
- Outline a Strategic Environmental Management Plan (SEMP)

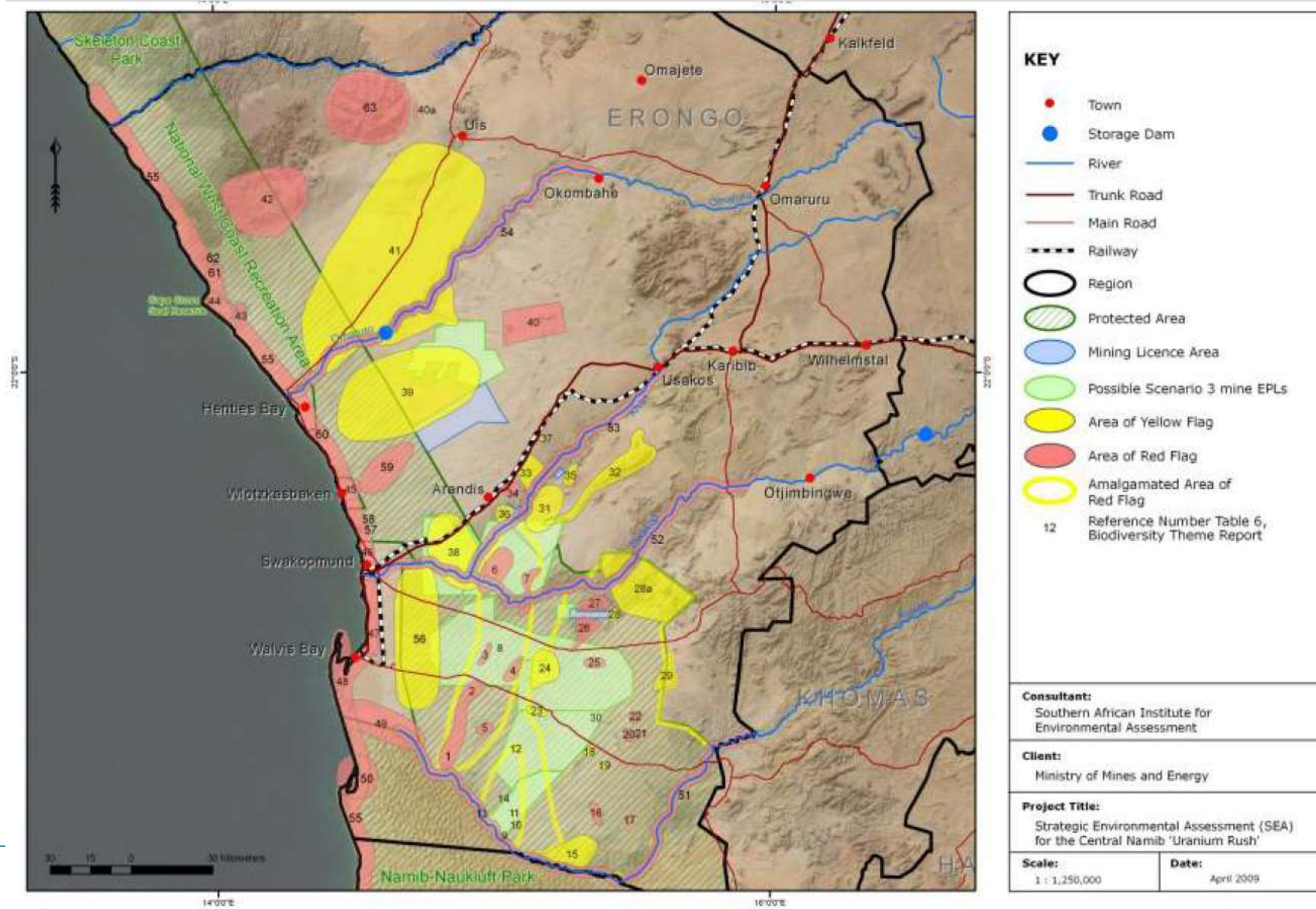


Effects of SEA

- Better prepared government agencies
- Insight into interests of different sectors and their stakeholders (also spatially)
- Biodiversity, tourism and heritage 'hot spots': no-go areas
- SEMP provides framework for individual mine EIA and license
- Government 'panic' turned into responsible mine development



Sensitive biodiversity areas



In general: what project EIA can NOT do

- Solve institutional weakness of a country (regulations, policies, expertise)
- Balance the interests of mining sector against other interests
- Cumulative effects of numerous mining activities
- Assess the contribution of mining to national or regional inclusive and sustainable growth



Advantages of SEA

For companies:

- Government is well-prepared
- Regulations are in place
- Roles and responsibilities for private and public actors are clear (level playing field)

For government:

- Better prepared for new developments (institutions / capacity)
- Division of tasks between government agencies defined
- Anxieties and aspirations of stakeholders known

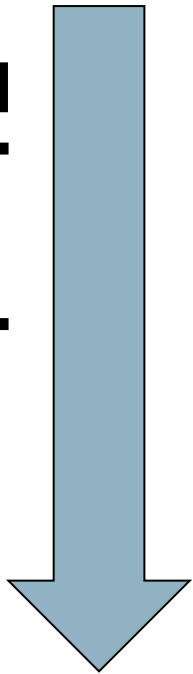
For society

- Mining contributes to regional development
- Negative consequences minimised and under control
- Weakest groups in society known and protected



Levels in decision-making for mining activities

Tiering



- SEA for national mining sector planning
- SEA for regional development planning (the Namibia example)
- EIA for individual mining projects

Infrastructure and economic corridors in GMS

- Corridor as 'backbone' for economic integration and poverty eradication
- Transport needs (people, goods, power, water, communication)
- Starting with broadly defined corridors, further specified at lower planning level



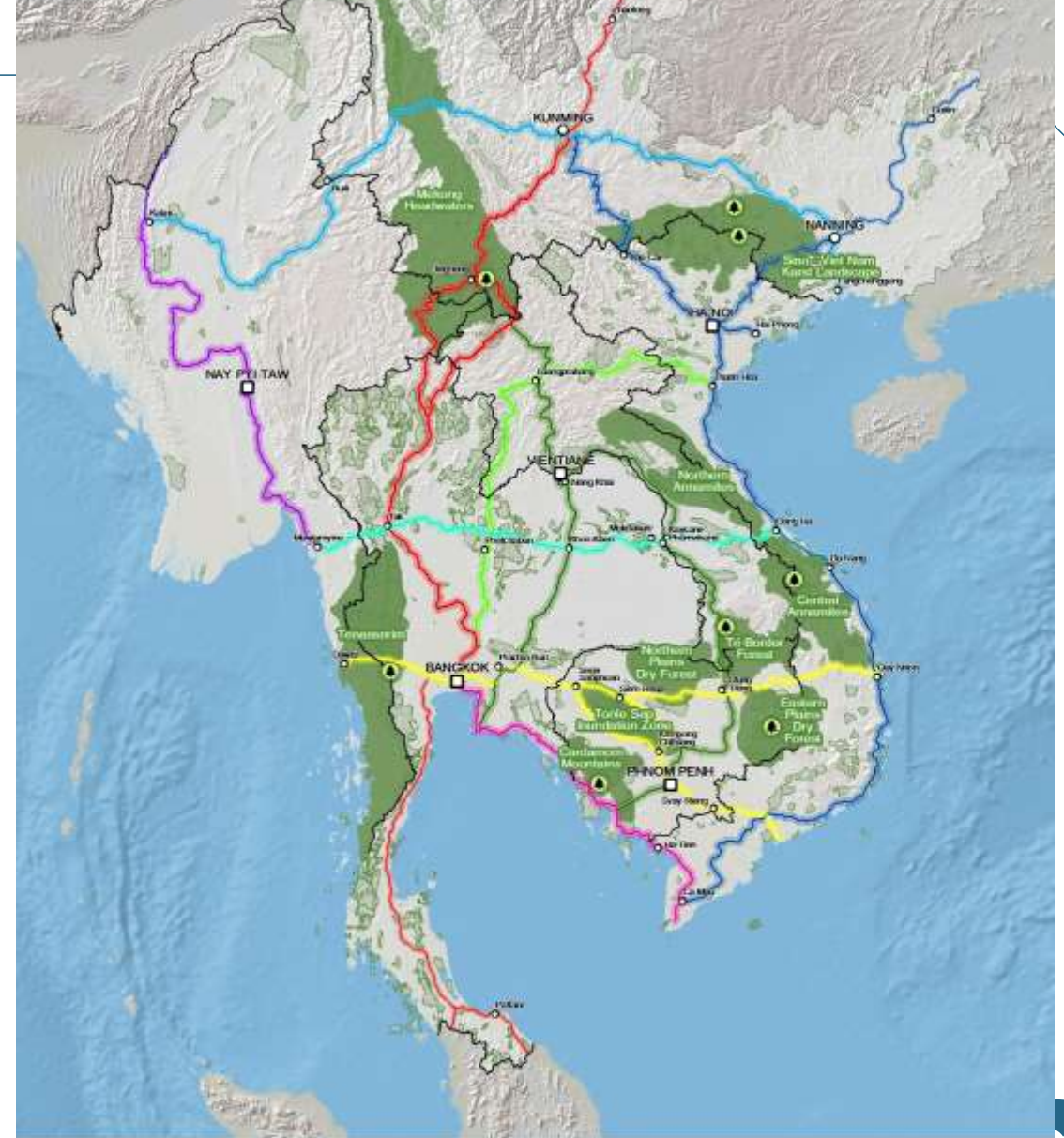
Transboundary Biodiversity Landscapes in GMS Region

Mapping of:

- Existing protected areas
- Additional protected corridors (connectivity)
- Sustainable use areas for local population

SEA: overlay with routing alternatives of economic corridors

Source: Core Environment Program (www.gms-eoc.org)



Transport Corridors, Biodiversity Landscapes, and Biodiversity Corridor Pilot Sites in the Greater Mekong Subregion



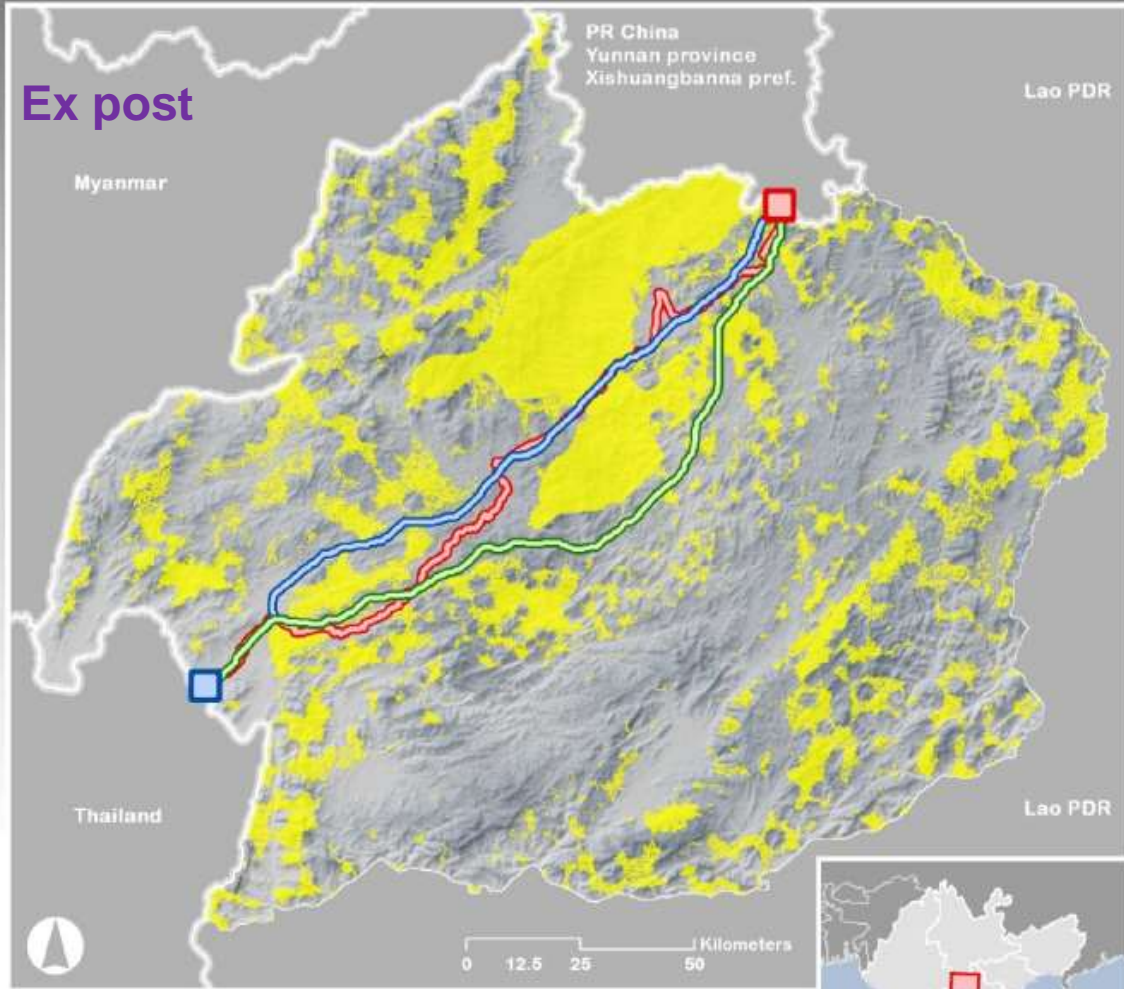
North-South Economic Corridor (NSEC)

SEA with spatial multi-criteria analysis:

- Mapping ecological and social high risk areas to be avoided (biodiversity corridor; territory of vulnerable groups).
- Giving different weights to economic, ecological, and social criteria provides alternative routings
- Leading to a better informed decision on the selected routing alternative.



LAO PDR: LUANG NAMTHA, BOKEO AND OUDOMXAY PROVINCES
LEAST-COST-PATH CALCULATION - ALTERNATIVE ROUTES



KEY TO FEATURES

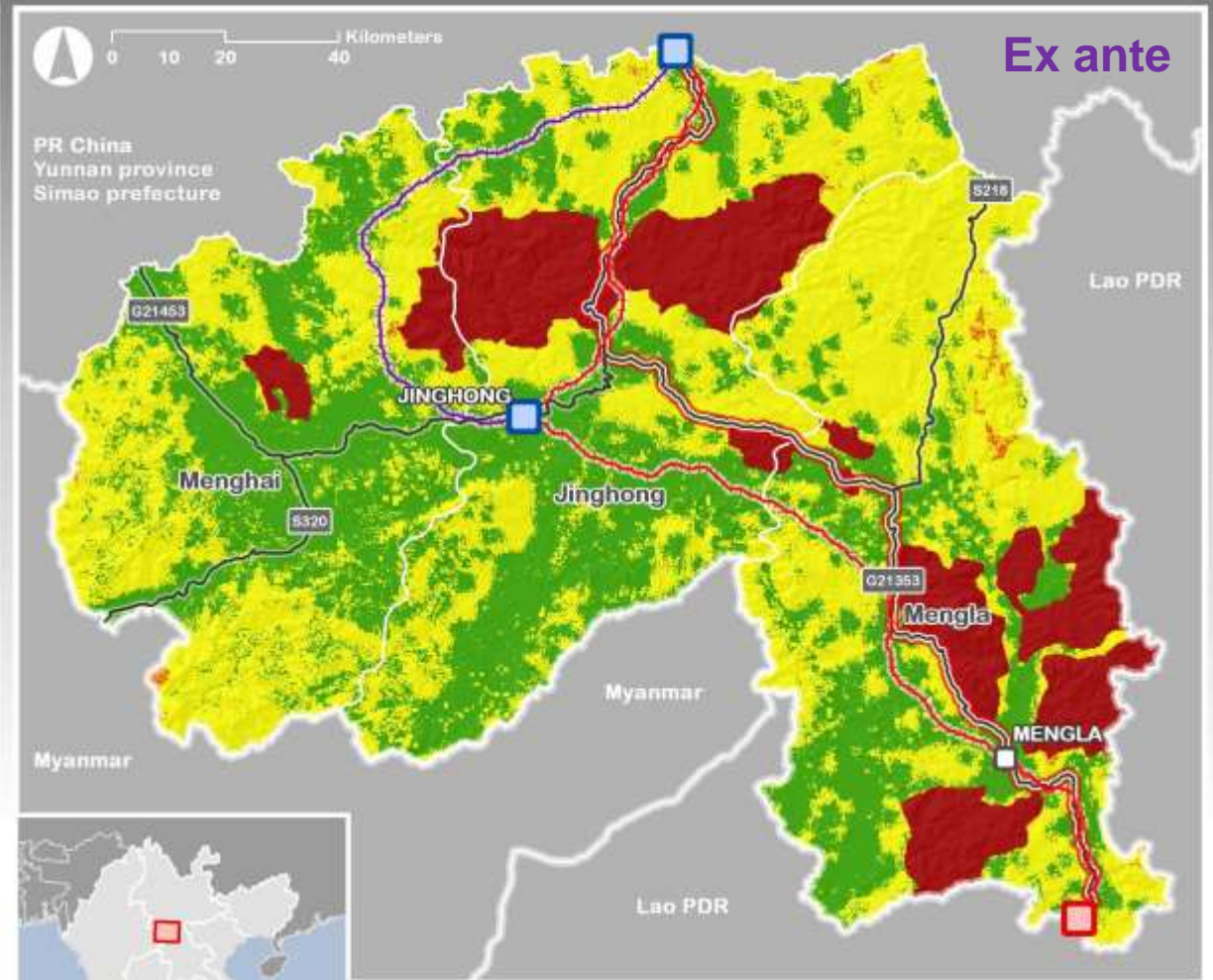
- Source
- Destination
- Alternative route, PA avoided
- Alternative route, PA allowed
- NSEC road (AH3)
- Vulnerable area



Boundaries and model outputs are not necessarily authoritative.
 Projection: UTM WGS84/26N. Data source: ADB, RPDI, MDM, WWF



PR CHINA: XISHUANGBANNA PREFECTURE OF YUNNAN PROVINCE
SMCA OUTCOMES: EQUAL VISION (ENV: 33%, ECO: 33%, SOC: 33%)



Boundaries and model outputs are not necessarily authoritative.
 Projection: UTM WGS84/26N. Data source: ADB, YEPF, XTBG



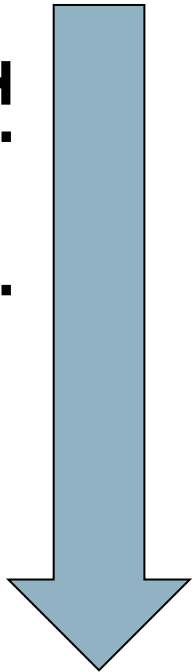
KEY TO FEATURES

- Major city
- Major road
- NSEC road (AH3)
- Source
- Destination
- +— Railway - least cost option
- +— Railway - least cost option (PA avoided)
- Suitability (equal vision)**
- Not suitable
- Low suitability
- Medium suitability
- High suitability

Ex ante

SEA for Infrastructure & Economic Corridors

Tiering



Levels of decision making:

- SEA for (international) corridors plans (biodiversity corridor example).
- Programme SEA: alternative transport modes and routings within corridor (NSEC example)
- Project EIA: implementation of projects

NCEA cases available

Mainstreaming of biodiversity in:

- Mining
- Infrastructure and economic corridors
- Hydropower
- Regional / spatial planning

More info: www.eia.nl

