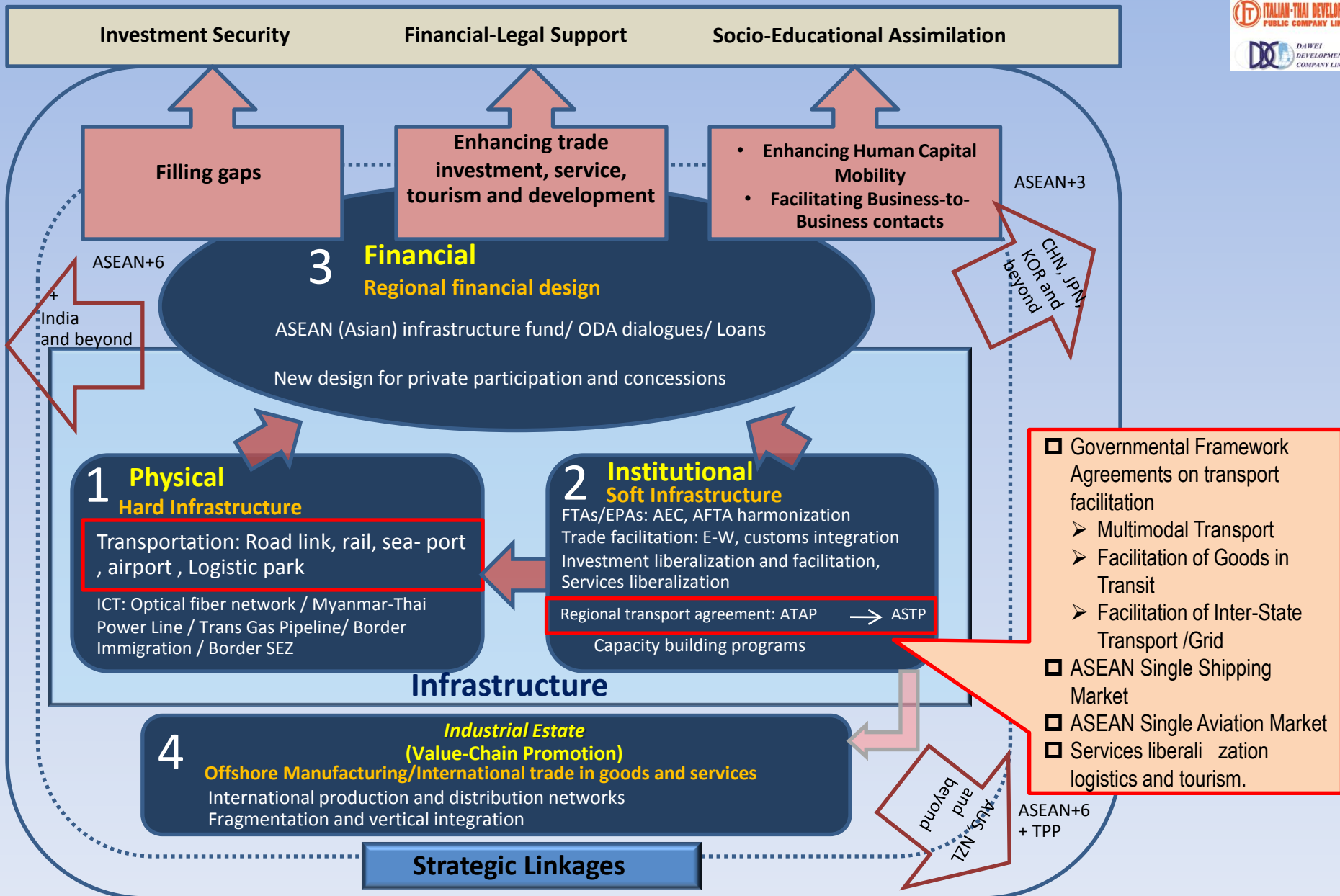


ASEAN CONNECTIVITY: CONNECTING ON ALL FRONTS

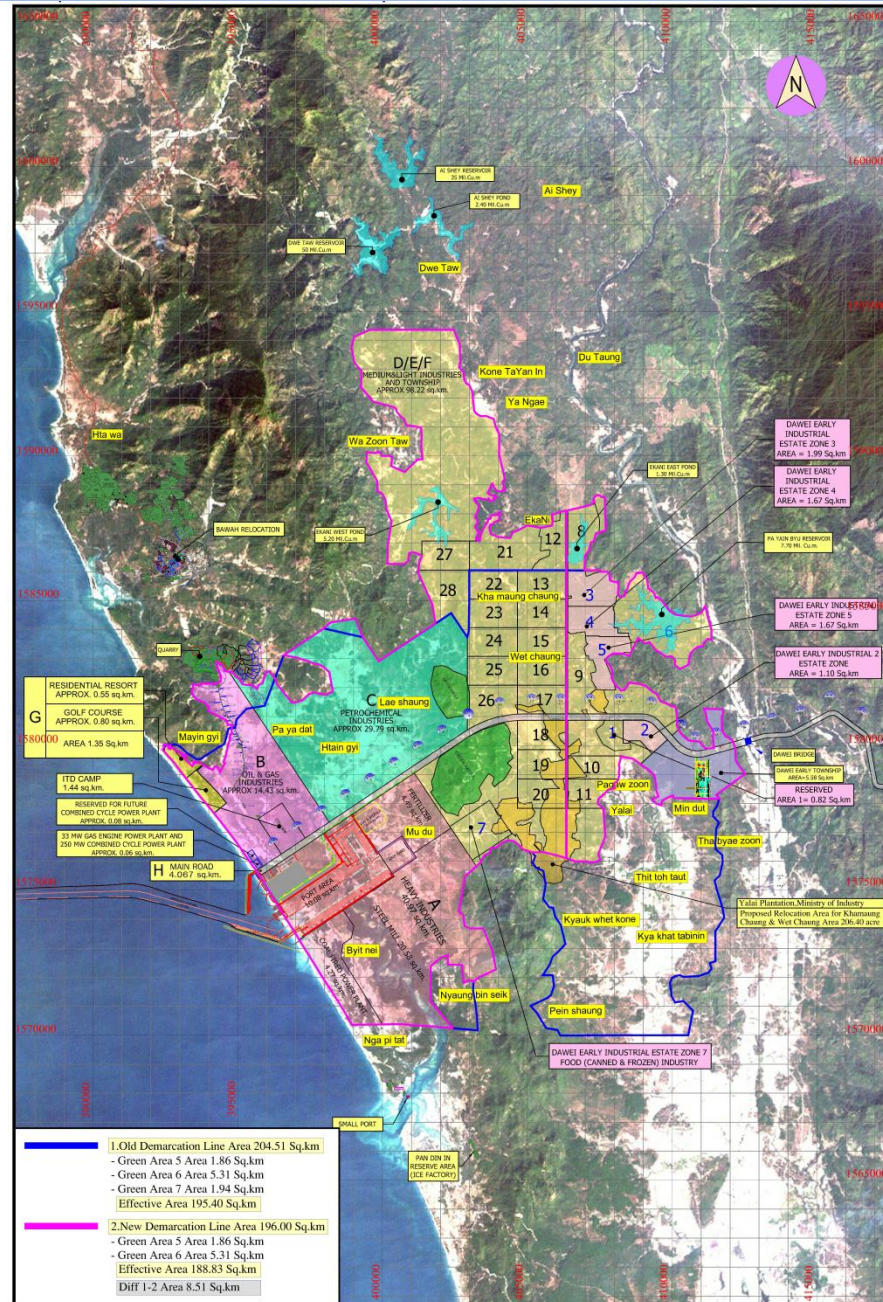
By
Dr. Somchet Thinaphong

ASEAN CONNECTIVITY: CONNECTING ON ALL FRONTS





DAWEI PROJECT LAYOUT



Traditional Routes via Strait of Malacca and the new Emerging Routes via Dawei Port



A New Gateway for the East?

The Dawei deep-sea port is intended to become one end of a land bridge for freight, linking India, Africa and Europe with China and other East Asian nations and replacing the longer and often pirate-patrolled sea route through the Malacca Strait



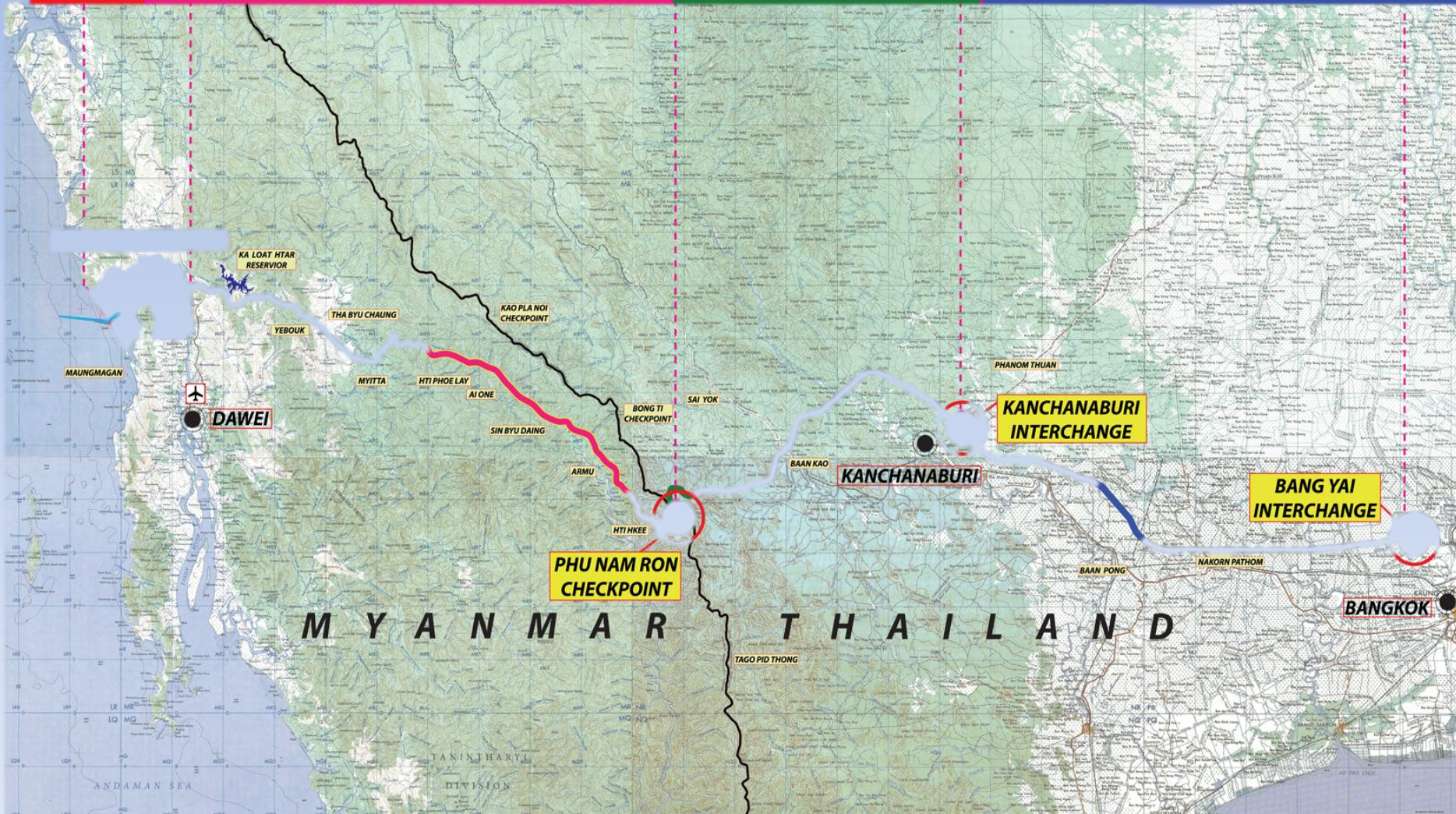
TRANSBORDER CORRIDOR LINK TO THAILAND

INDUSTRIAL
ESTATE ROAD
18 km

TRANSBORDER CORRIDOR LINK
DAWEI - PHU NAM RON
132 km

HIGHWAY CONNECTION
PHU NAM RON - KANCHANABURI
80 km

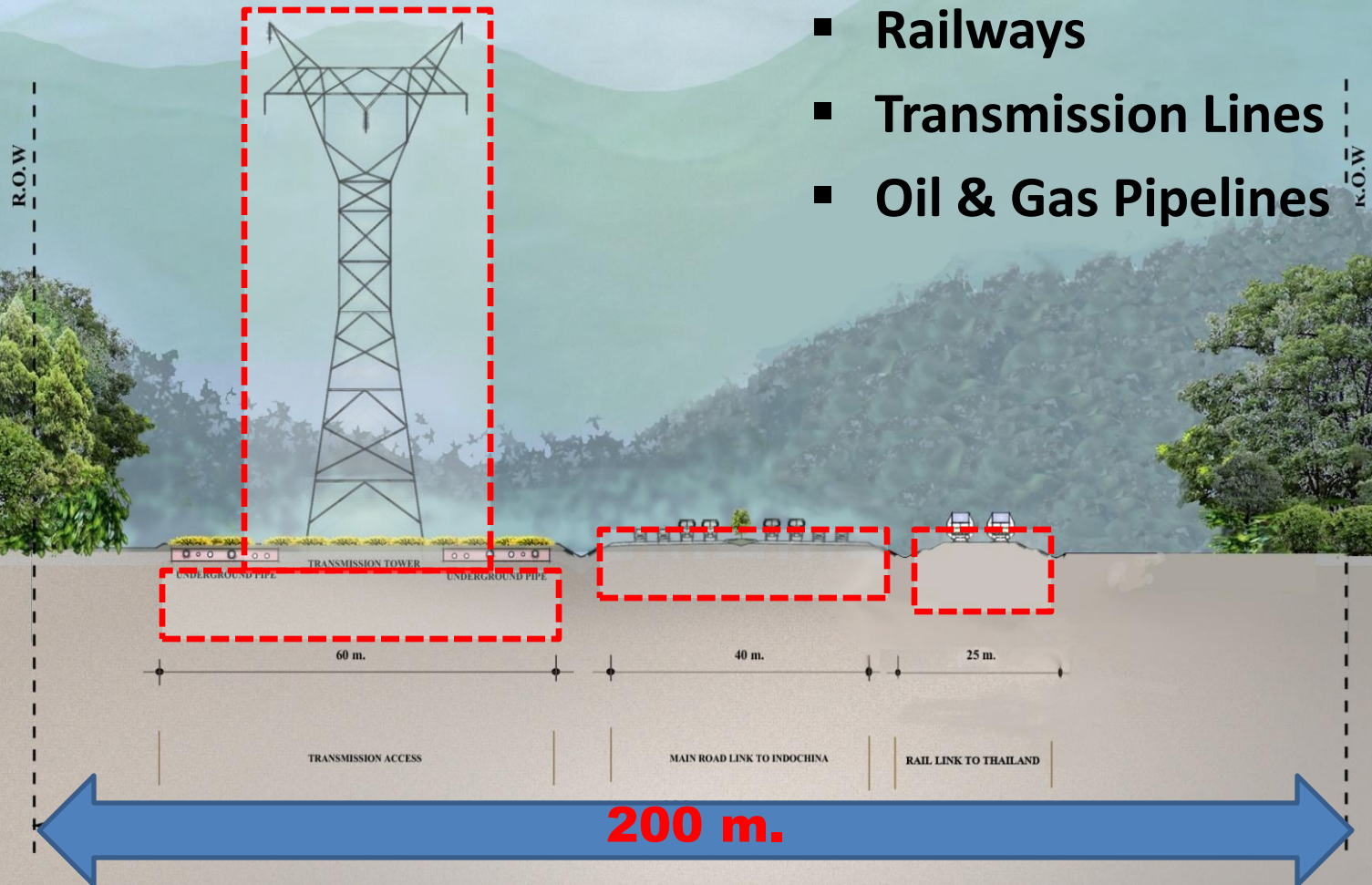
MOTORWAY *
KANCHANABURI - BANG YAI
95 km



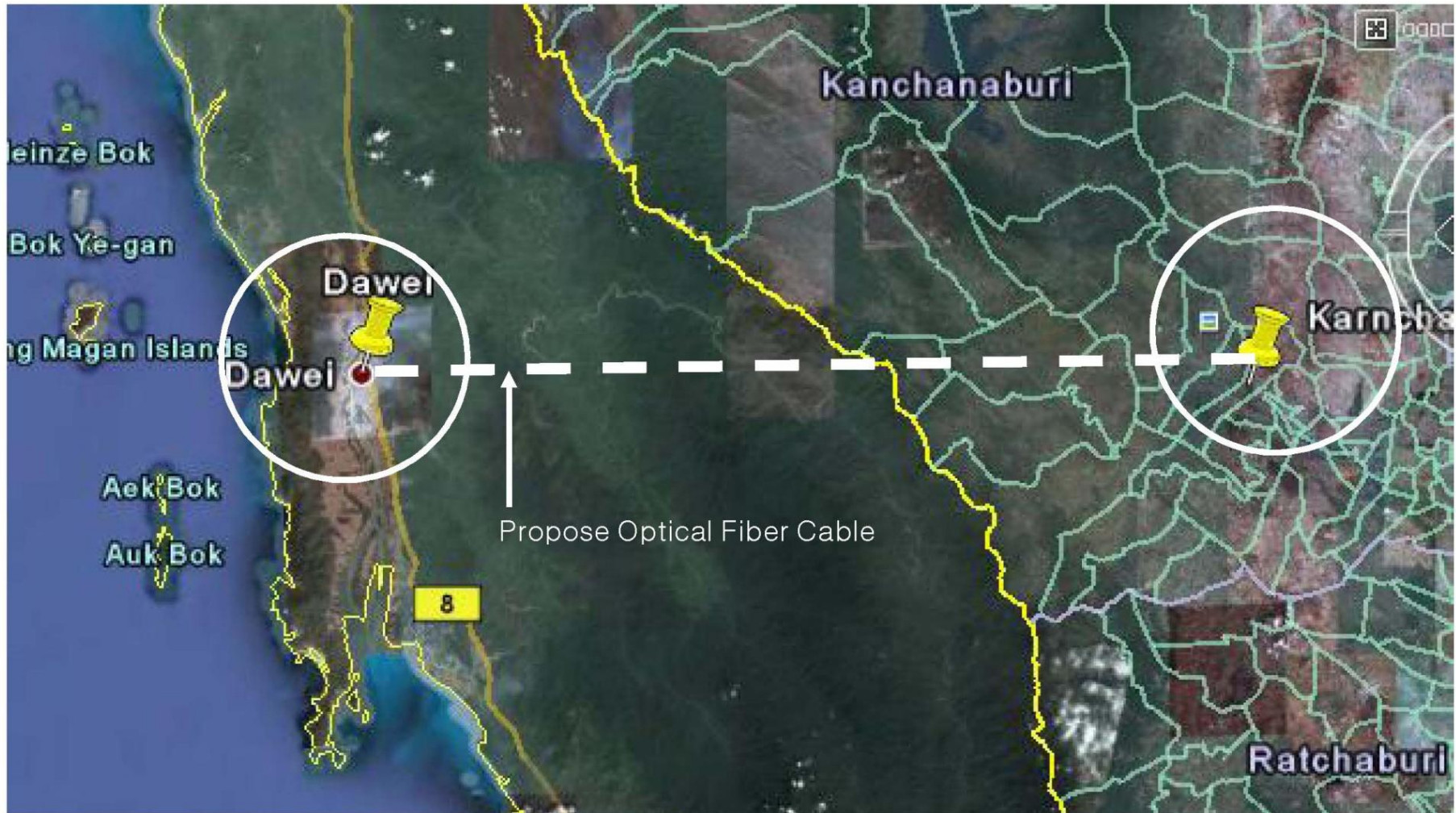
Corridor Link to Thailand



- Roads
- Railways
- Transmission Lines
- Oil & Gas Pipelines



Gateway for International Connection



Interconnect location via Phu Nam Ron

SMALL PORT



Small Port (Seeing from Southwest)

2-LANE ASPHALT TOLL ROAD

- ❖ 146 km length from DSEZ to the Myanmar-Thailand border at Ban Phu Nam Ron, Kanchanaburi Province, Thailand
- ❖ Operate by 2014



ROAD LINK

TYPICAL SECTION OF TALL BRIDGE



Box Girder Bridge built by balanced cantilever method for Tall Bridge

ROAD LINK

TUNNEL & PORTAL WITH VIADUCT & AT-GRADE HIGHWAY

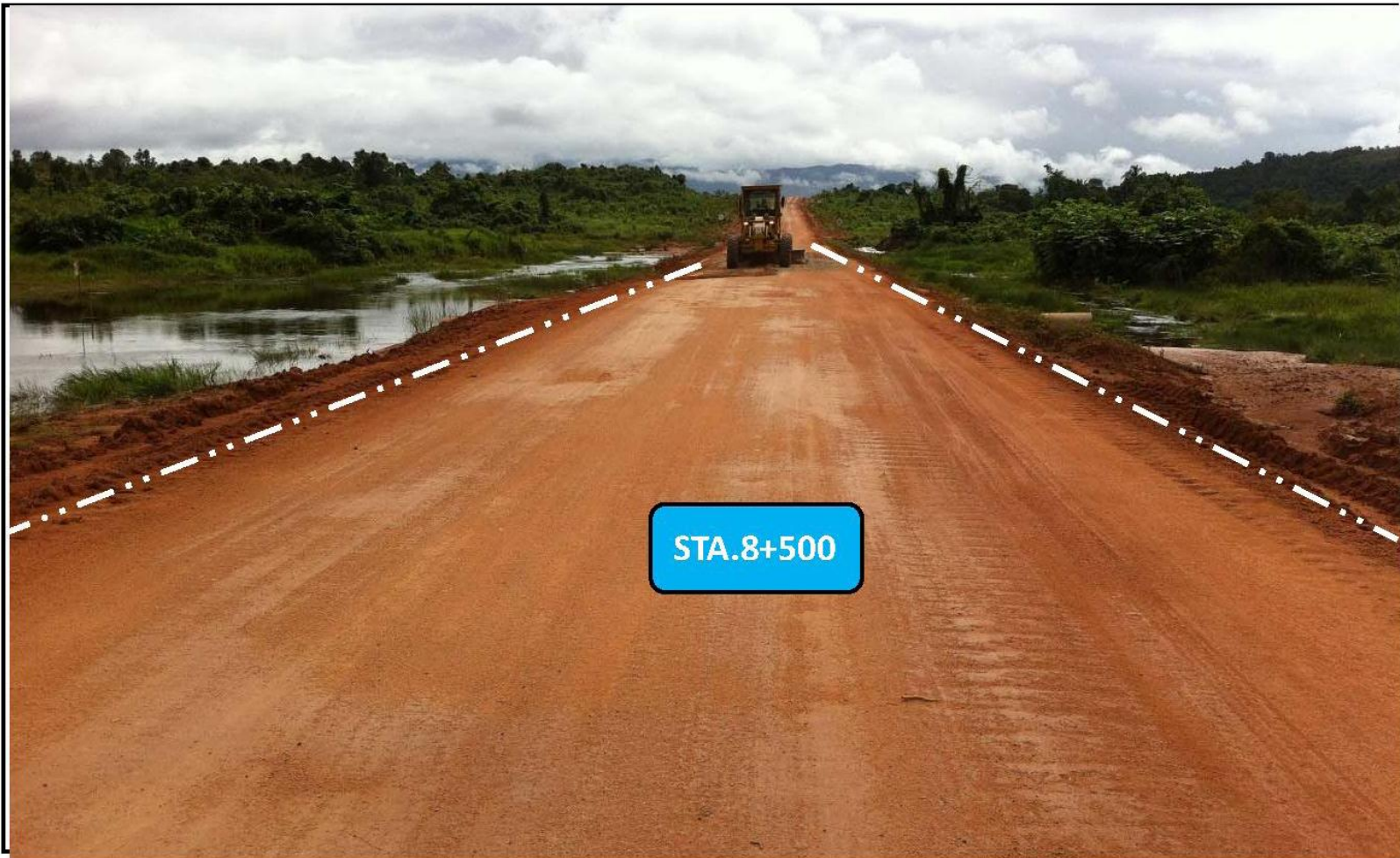


ACCESS ROAD



Access Road from Myanmar-Thailand border

MAIN ROAD IN DSEZ



Road Surface Improvement at Sta. 8+500 (Main Road)

QUARRY WORK



Stone Quarry

QUARRY ROAD



Quarry Road (from South
Breakwater to KM.0+000) laying
of base course

BAWAH RELOCATION AREA



480 Relocation Houses Construction Completed

Virtual Constellation for ASEAN

(Proposal from Thailand)

May 2013

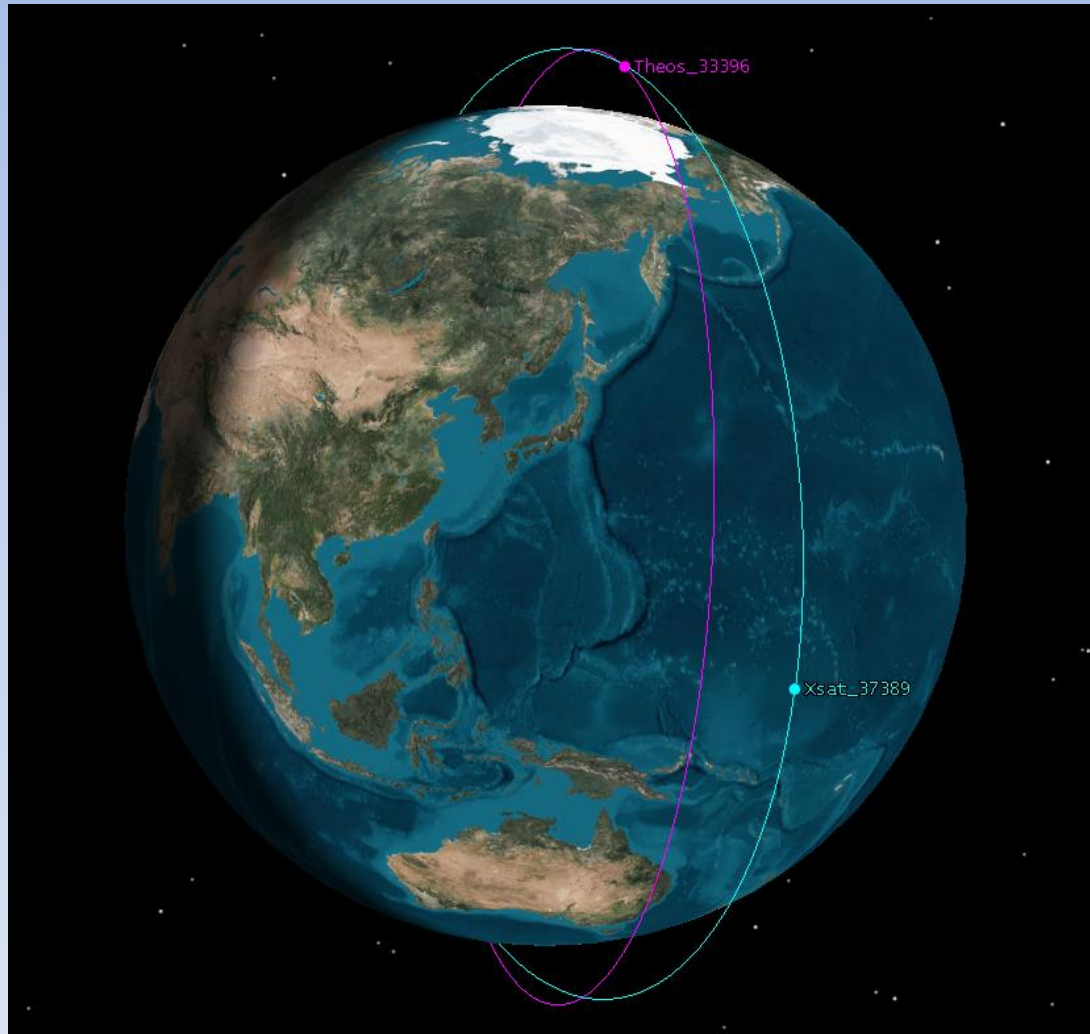
Virtual constellation possibilities

- Image sharing / exchanges
 - Need to agree on the data policy
 - Catalogue system implementation (access & ordering)
- Ground segment
 - Receiving and / or processing capability
 - Satellite control (relay)
 - Collaborative Satellite Mission Planning and Tasking
- Satellite formation flying
 - Actual orbit
 - Orbit adjustment to form better constellation
 - Orbit determination for new satellites

Virtual constellation simulation

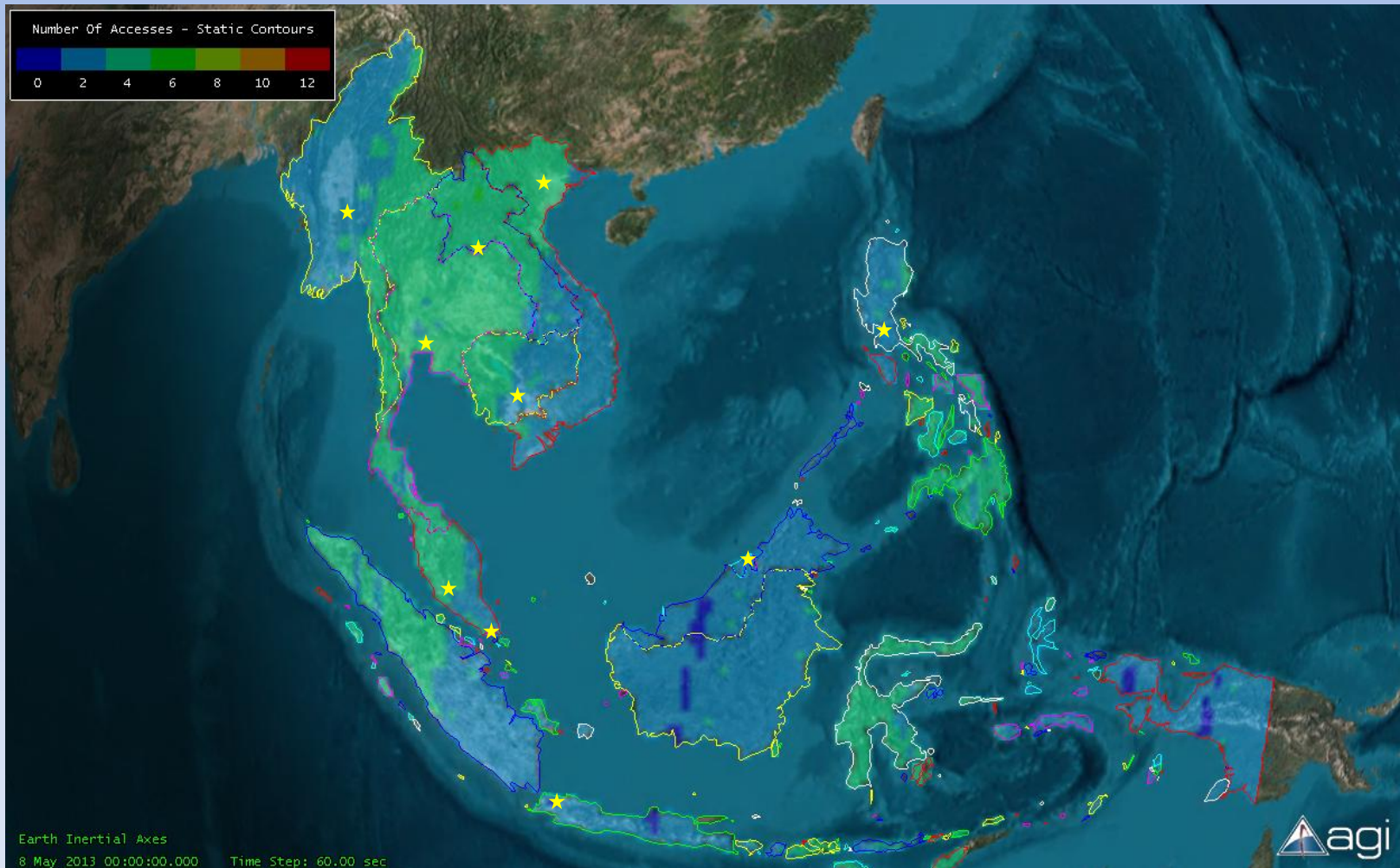
- Two satellites
 - THEOS (Thailand)
 - X-Sat (Singapore)
- Number of accesses
 - ± 30 degree viewing angle
 - 8th to 15th May 2013
- Days of full coverage in ASEAN capital cities
 - ± 30 degree viewing angle
 - May - June 2013

Virtual constellation simulation



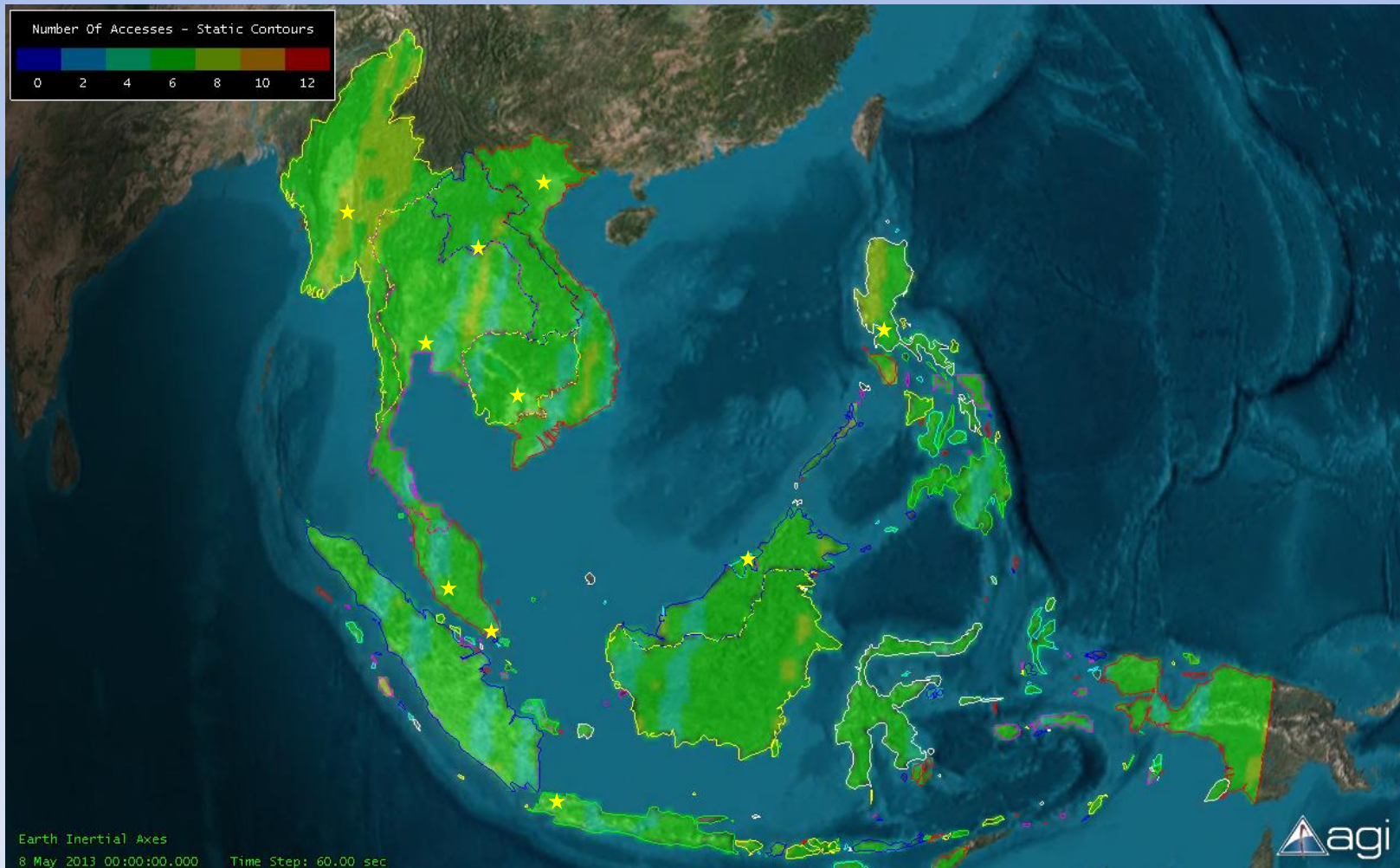
Simulation: THEOS

- Number of accesses (at ± 30 degree viewing angle) – 8th to 15th May 2013



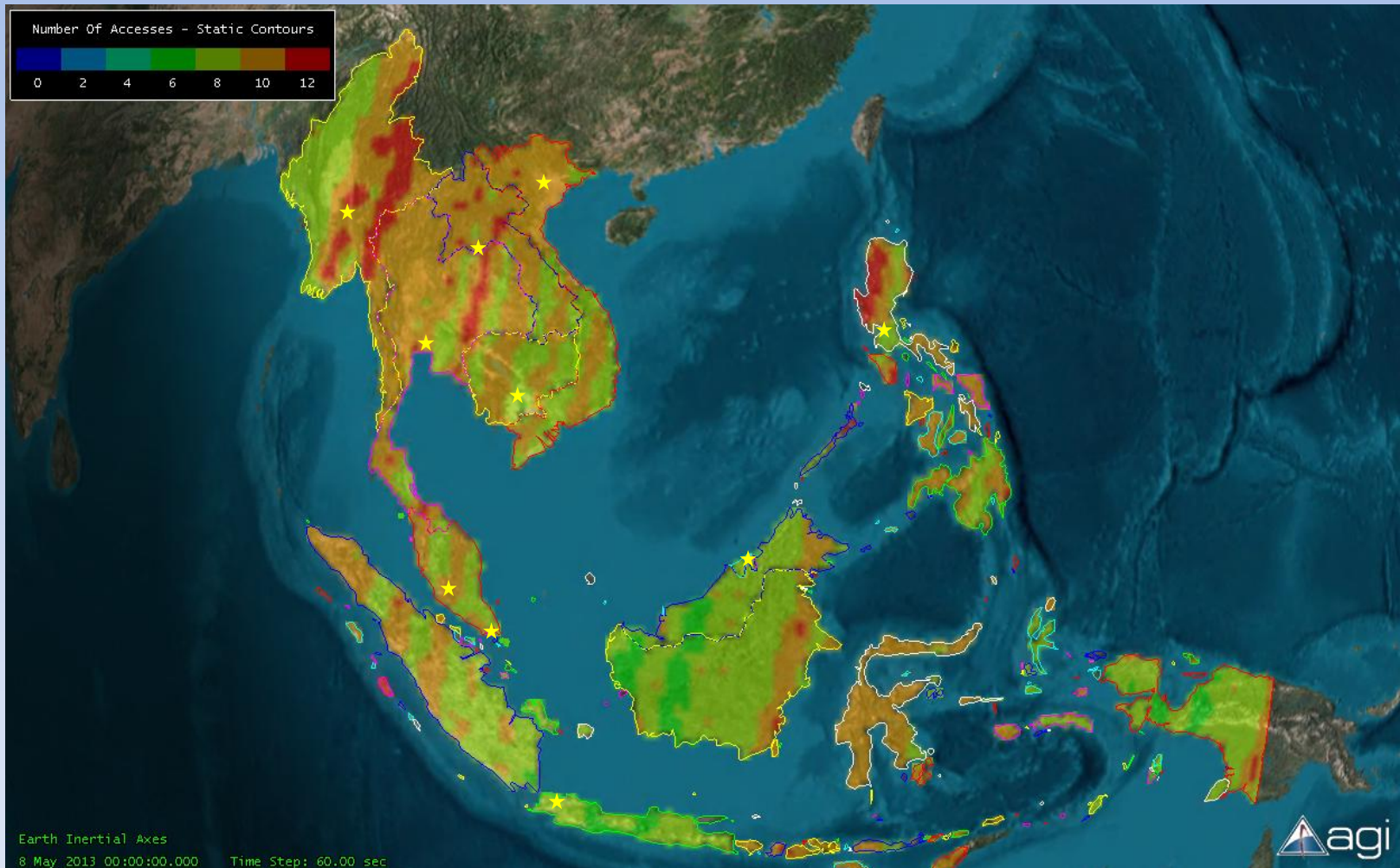
Simulation : X-Sat

- Number of accesses (at ± 30 degree viewing angle) – 8th to 15th May 2013



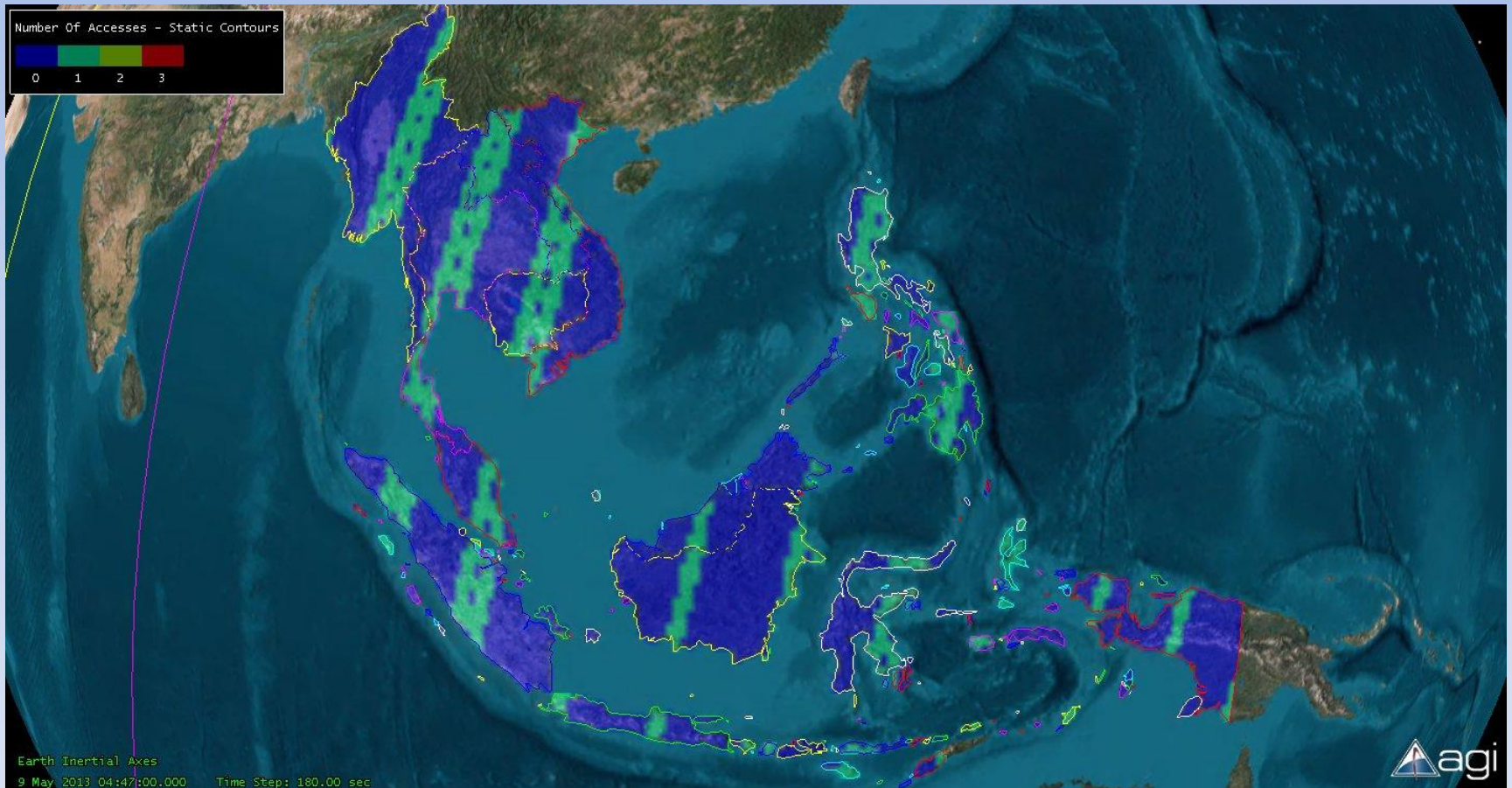
Simulation : THEOS & X-Sat

- Number of accesses (at ± 30 degree viewing angle) – 8th to 15th May 2013



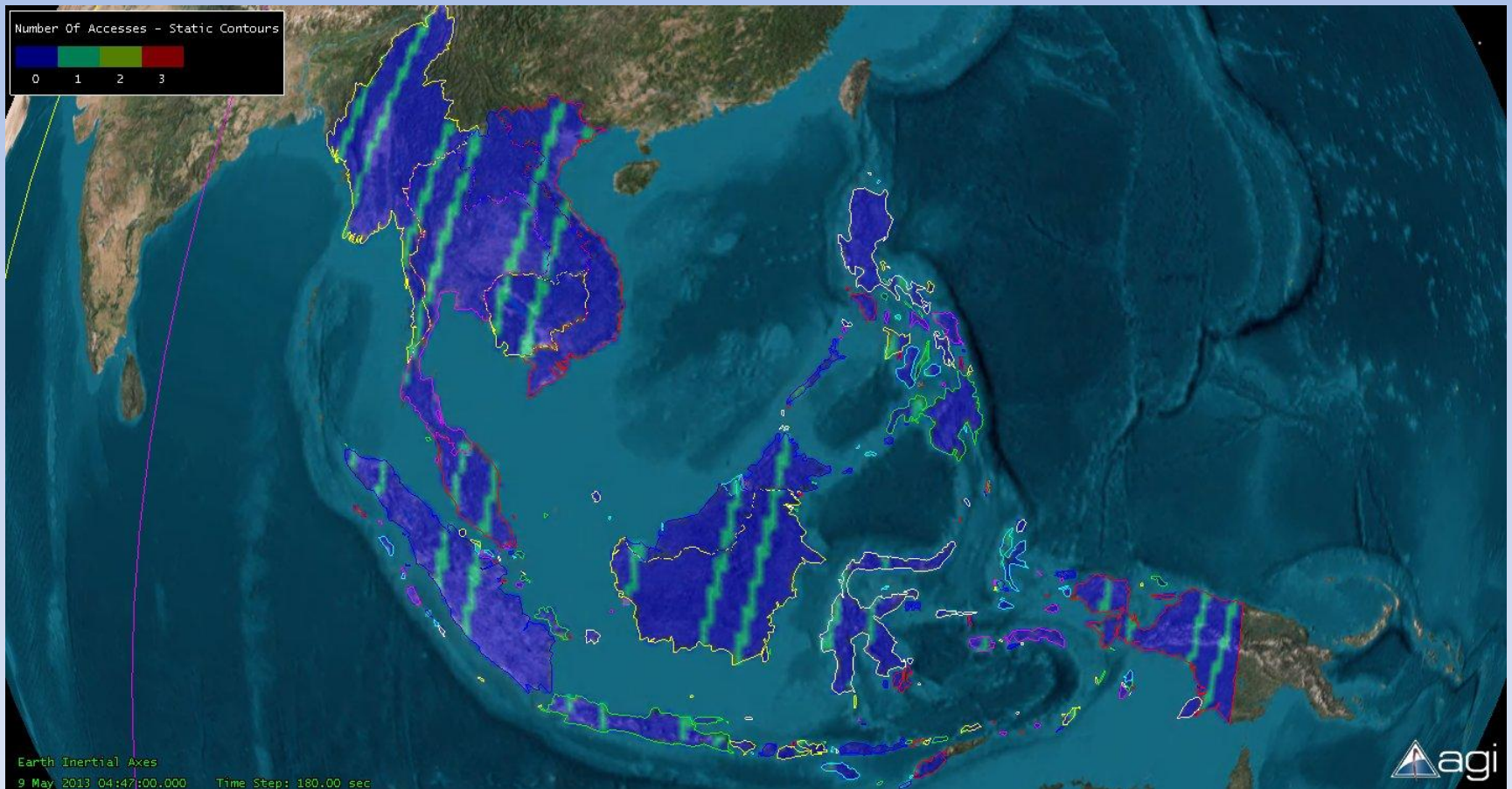
Simulation: THEOS

- Number of accesses (at nadir) – 8th to 15th May 2013



Simulation : X-Sat

- Number of accesses (at nadir) – 8th to 15th May 2013



Simulation : THEOS & X-Sat

- Number of accesses (at nadir) – 8th to 15th May 2013

