

# Feasibility Study for the Development of a Multipurpose Terminal in the Dinh Vu Economic Zone, Hai Phong (Vietnam)



**Financed by:** IPEM Cy.

**Client:** Dinh Vu Economic Zone Consortium IPEM, AIG, AID

**Date:** 1997 - 1998

**Budget:** € 75 000

**Location:** Hai Phong, Vietnam

**Partners:** - Transport and Design Institute TEDI (Ha Noi)  
- Geological Survey of Vietnam  
- Hydro Soil Services (Zwijndrecht)

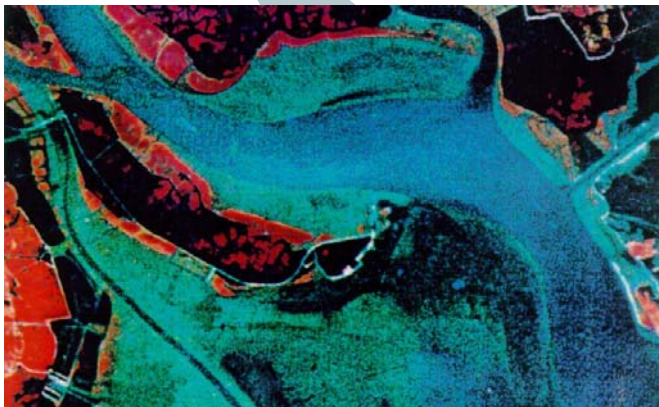
## Assignment:

Soresma-haecon was awarded the consultancy and engineering contract for the design of a multipurpose quay wall, the dredging works, the landfill and the coastal protection works at Dinh Vu Economic Zone in Hai Phong.

## Scope of Services:

- Geotechnical engineering for quay wall construction and landfill (mud treatment)
- Engineering of capital and maintenance dredging
- Design of access channel and turning basin
- Design of associated coastal protection works

## Technical Description:



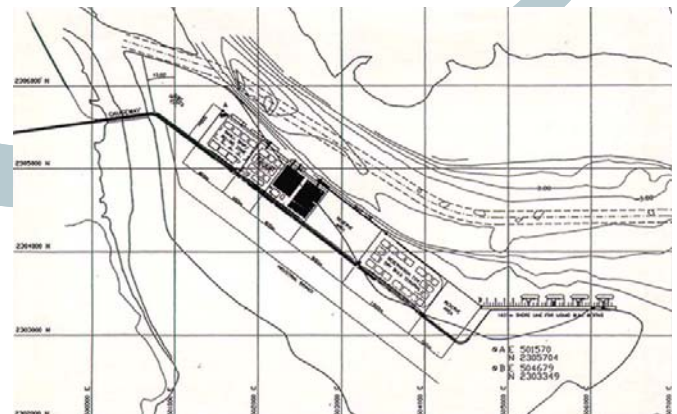
*Spot multispectral satellite image of Dinh Vu Island*

The Dinh Vu Economic Zone Consortium companies IPEM (Belgium), AIG (USA) and AID (Thailand) received the approval from the Vietnamese Ministry of Transport (MOT) to carry out a feasibility study about a multipurpose terminal (approx. 3,900 m quay length) at Dinh Vu peninsula (Hai Phong). The project is to be viewed within the Hai Phong Port rehabilitation and development plan.

The Dinh Vu terminal is located at about 400 m from the main access channel to Hai Phong Port and will benefit from the planned channel improvement plan. Particular challenges to this project were given by :

- thick 'soft' muddy soil (approx. 40 m) requiring deep pile foundation techniques
- large scale settlements of the soil whereupon a port terminal is to be established (load : min. 6 t/m<sup>2</sup>)
- need for landfill
- high siltation in both turning basin and berth trench
- search for sand in the Hai Phong Bay (for landfill)

The terminal is designed in consecutive development stages, for respectively fully loaded 10,000 and 30,000 DWT ships.



*Layout of multipurpose terminal (Dinh Vu Economic Zone)*



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