

INTERNATIONAL BOUNDARY FIXING AND THE ROLES OF INDONESIAN SURVEYORS

by:

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OUTLINE



- I. INTRODUCTION
- II. THE BOUNDARY MAKING AND LOSC
- III. THE TECHNICAL ASPECTS OF BOUNDARY MAKING & TALOS
- IV. THE ROLE OF INDONESIAN SURVEYORS
- V. CONCLUSION



Introduction

- I. *The roles of geodetic surveyor in Indonesia's international boundary fixings have formally been recognised since 1969.*
- II. *From only as a boundary map drawer in maritime delimitation and as land border demarcation surveyors.*
- III. *Their current role as boundary engineers, boundary managers and boundary designers, both in land boundaries and maritime boundary delimitations*

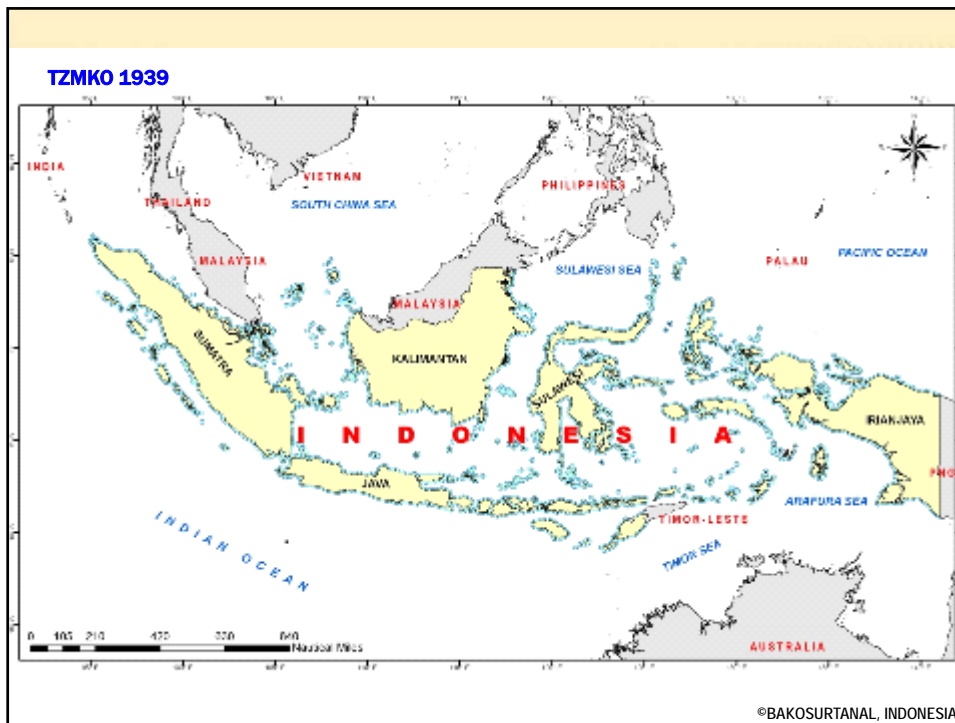
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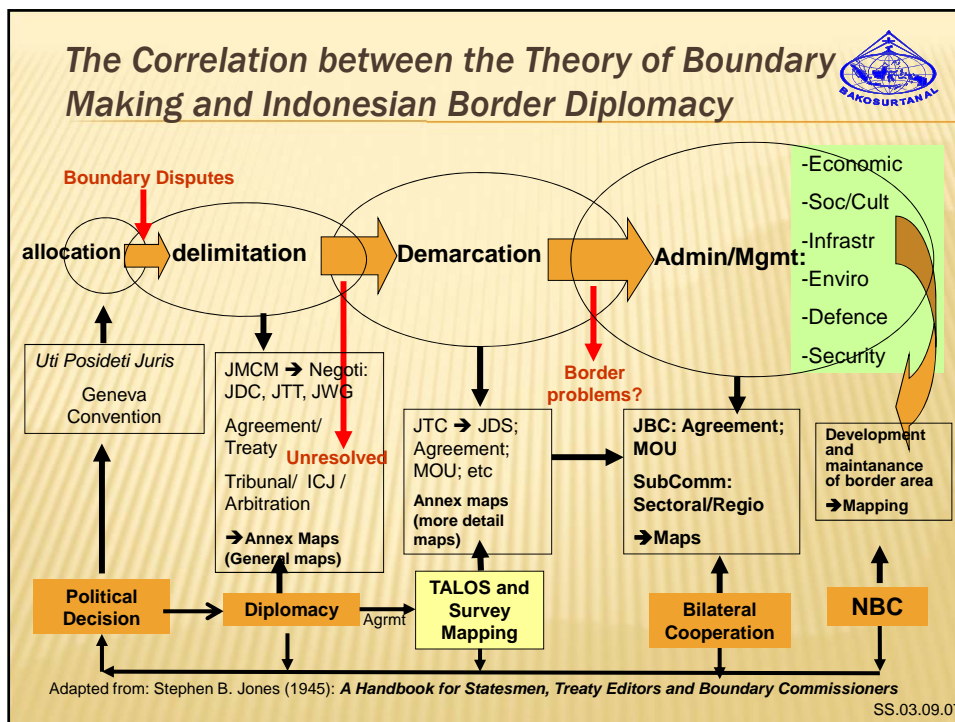
Introduction: Indonesia and Its Neighboring Countries



10
countries

4





- ### The Technical Aspects of Boundary Making
1. **Allocation:** technical opinions related to general boundary description maps, reliable and accurate related data bases for the purpose of negotiations in delimitation process, etc.
 2. **Delimitation:** Boundary definition, Verbal treaty formulation, Treaty map construction, Geodetic datum, etc.
 3. **Demarcation:** treaty interpretation, Border pillars erection, coordinate fixing, watershed mapping, thalweg mapping, offset surveys, border monument reconstruction, Border joint mapping, point positioning, traversing, staking out, minutes plan, different coordinate systems problem-solving, etc.
 4. **Administration:** joint border mapping, frontier area mapping, spatial planning maps, border markers meaintenance, and the establishment of boundary data base and information system, etc.
- LOSC → TALOS

Indonesian Surveyors in Boundary Making



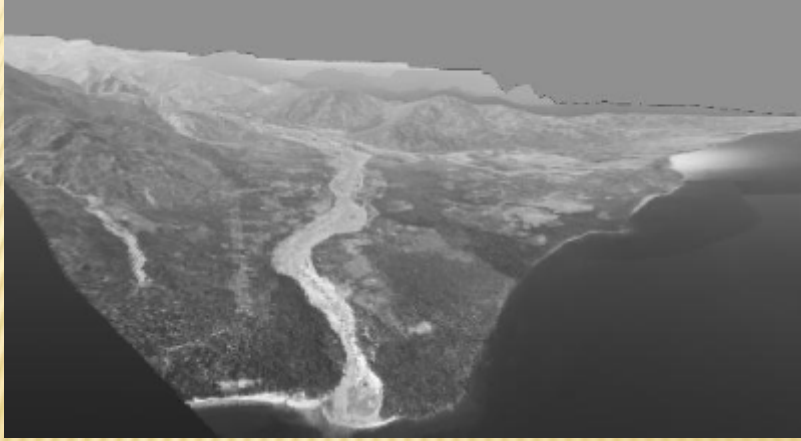
1. *The technical issues are the main competence of surveyors.*
2. *Such as treaty interpretation, border monument erections, coordinat fixing, watershed mapping, thalweg mapping, offset surveys, borderline reconnaissances, joint boundary mapping, point positioning, traversing, staking out, minutes plans, different coordinate systems problem-solving, territorial seas, eez and continental shelves projections in accordance to relevance legal references.*
3. *In boundary delimitation, surveyors play a role as boundary engineers which contribute technical suggestion and or support to the chief negotiators.*

Indonesian Surveyors in Boundary Making

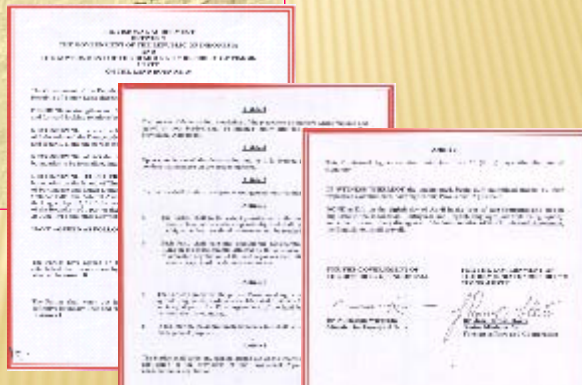
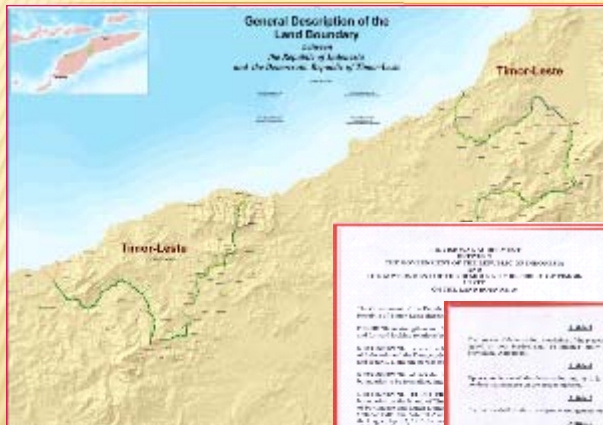


3. *Surveyors also provide: reliable geospatial data (base maps, photogrammetric imageries, satellite emageries, digital terrain model, etc.), land border definition, maritime delienation methods, identification of boundary geographical features elements, method of proportionality principles, boundary dispute settlement, expertise in boundary negotiation.*
4. *Trusted as the leader in the forums of joint border mapping, frontier area mapping, spatial planning maps, border markers meaintenance, border crossing. And also members of joint boundary commission.*

Example: Border demarcation (Indonesia – Timor Leste)



The Result: Provisional Agreement 2005



Indonesian Surveyors in Boundary Making



Conclusion



1. *Indonesian surveyors play significant role in every stages of Indonesian international boundary making.*
2. *Indonesian surveyors contribute far forward from being only surveyors in the past into a boundary designers and engginers.*
3. *Indonesian surveyors develop their knowleged and skill from time to time.*

