

"Stability and finality should be the underlying object of all international boundaries"

ICJ 1962, The Temple (Preah Vihear) Case



## The Existing Nodel

- Allocation
- Delimitation
- Demarcation
- ...Administration

## The Importance of the Professional 🧾

- Unclear definition of boundary in allocation
   problems in delimitation and achievement of a treaty
- Non sufficient definition of the delimitation a conflict before or during demarcation
- Demarcation not well documented →potential conflict in the future
- Boundary not well maintained
   behavior on ground does not fit the boundary line, a cause of future conflict

### Interrelation with the Political and Administrative Framework Political and administrative

Political and administrative Framework:

Negotiations

Treaty

allocation delimitation

maintenance

Administration

Definitions



- Allocation: "The initial political division of territory between two states", Jones (1945).
- Delimitation: "The definition on paper either in words or on a map of the limits of a country", McMahon (1896).
   "Delimitation signifies all the earlier process for determining a boundary down to and including its embodiment in a treaty", Curzon (1907).
- **Demarcation**: "Laying the boundary on the ground", McMahon (1896). "Applying to the final stage and the marking out of the boundary on the spot", Curzon (1907).



#### The Non-Linear Nodel

- Allocation
- Delimitation
- Demarcation
- Final delimitation

Example of the 1923 international boundary between Palestine, Syria and Lebanon



- According to ICJ (1962, The Temple Case) only the demarcation defines finally the boundary.
- A level of latitude should be granted to the demarcators in order to take into account local considerations.
- Small scale maps and verbal descriptions of natural or artificial features are not adequate delimitations for proper demarcations.
- The demarcation should be followed by survey measurements and joint documentation.



- The stage in which the experts translate the general definitions of the allocation into precise definitions.
- In order to avoid complications during the demarcation the participation of experts (JTE) who are capable of anticipating practical problems is essential.
- The use of ORTHOPHOTO and/or ortho-images for the delimitation documents is recommended.
- If possible, the use of GPS and initiation of coordinates is recommended.

#### Naintenance

- Continuous annual maintenance is important in order to locate deviations and solve them before the development of disputes.
- The task should be assigned to a joint technical team.
- Detail technical documentation should be reference material for maintenance.
- Joint periodical reconnaissance tours followed by practical maintenance actions (like repair, reconstruction etc.) should not be delayed too long in order to avoid deterioration.
- Joint periodical reports should be prepared.

#### Documentation



- We think that a joint comprehensive detailed documentation of a boundary is the ultimate mean to achieve the goal of stability and finality.
- A proper documentation is sufficient to support any construction or reconstruction of boundary pillars.
- Legally, a mutual delimitation and joint agreed and signed documentation are sufficient without demarcation.
- The use of satellite surveying (GPS etc.) is sufficient for centimeter level accuracy and is recommended together with creation of a Joint Boundary Datum for initiation of joint coordinates.
- The use of GIS is recommended for handling the boundary information.

#### The JTE



A joint team of experts should be constructed as soon as possible during the process of boundary delimitation.

The JTE should be assigned all the technical tasks during the process regarding the delimitation, the demarcation, the documentation and the maintenance.

The JTE should be headed by boundary engineers who are familiar with geodetic work and have experience with the boundary process.





A proper process and a professional support leads to a stabilized boundary and prevents or reduces future conflicts, thus, contributing to peace all over the world.

# Order of Precedence of Boundary Delimitations

- 1. Precise joint boundary documentation
- 2. Joint coordinates
- 3. Boundary pillars
- 4. Maps
- 5. Verbal and graphic descriptions