

# Reaffirmation of Ghana-Togo Boundary: a Crossroads of Old and New Approaches to Position Determination

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## SUMMARY

The national territorial boundary of a state is as important as its sovereignty. Maintaining territorial boundaries in Africa is a bit complex considering the historical origins of how these boundaries came into being. Indeed, in many instances in Africa, national boundaries have carved portion of clans and common language speaking groups into different states. For Surveyors, whose responsibility it is to precisely define and accurately survey these boundaries, their hurdle surpasses the rigorous field observations and complex computations, but more importantly, how to cater to the interest of kinsmen along different state lines.

The discovery of oil in commercial quantities in Ghana's territorial waters led to a period of tensed relationship with neighboring Cote D'Ivoire over the disputed boundary between the two countries. Following several failed attempts at reaching a mutual agreement, the International Tribunal for the Law of the Sea (ITLOS) resolved the maritime boundary dispute in Ghana's favour in September 2017.

To forestall a future recurrence and the potential of another ITLOS case, the Joint Ghana-Togo Land Boundary Reaffirmation Technical Committee of the Ghana Togo Maritime Boundary Negotiation Committee was constituted to reaffirm the boundary between the two countries. The team consisted of Surveyors from the national mapping agencies of both countries. The determination of the land boundary terminus (LBT) was a prelude to the determination of the maritime boundary between the countries.

The main objective of this project was to reaffirm the boundary Ghana-Togo boundary as agreed and established by the Anglo-French demarcation report in 1929 in a bid to determine the location of Pillar 1 (P1), the Land Boundary Terminus which had been destroyed through human activities

along the boundary. The main challenge involved the conversion of astronomical coordinates identified in the demarcation report of 1929 to the coordinate systems of both countries and/or possibly any other recognized geocentric coordinate systems adaptable to the region.

Using descriptions of the turning points along the boundary from the demarcation report of 1929, the team combined both conventional and contemporary approaches of position determination to determine the coordinates of the pillars identified on the ground, and estimated the position of pillar 1 in both Geographic (WGS84) and UTM (zone 31N) coordinate systems.

The team agreed to establish a major monument at the estimated location to represent the Land Boundary Terminus and thus the point of projection of the maritime boundary between Ghana and Togo.

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