To ensure that actual carbon stock changes are reported, and not artefacts resulting from changes in area over time, it is good practice to implement the calculations of annual carbon stock changes when using any “stock difference method” in the following sequence: for each activity, ~~for each unit of land or land~~, the annual carbon stock change per unit land should first be calculated for the year of interest, and these per-unit-land-stock-changes should then be summed for all areas subject to the activity. The inverse sequence, i.e., first calculating ~~summing up~~ the total carbon stocks across all areas of one activity at times t1 and t2 and then calculating the difference in these total carbon stocks of this activity, ~~can~~ results in incorrect estimates ~~errors~~ if the ~~total~~ area of this activity at times t1 and t2 is not identical~~the same.; it is therefore good practice that area of each calculation at times t1 and t2 is identical. If the area subject to an activity increases from the beginning to the end of the reported years then the reported carbon stocks~~ The results of the inverse sequence would be significantly influenced by ~~reflect~~ the transfer of area ~~(~~and the associated total carbon stocks~~)~~ into and/or from the land category which is not identical to the carbon stock changes at these transferred areas between times t1 and t2~~; similary, carbon stocks will decrease, if area is removed from a land category12~~. For example, the use of the inverse sequence as described above for estimates at new AR lands would lead to an adding of the existing total soil C stocks at these AR lands as “C stock change” between times t1 and t2. This would represent an artefact that does not contribute to any C removals from the atmosphere. The issue is of particular concern when areas outside the reporting/accounting system enter into the reporting/accounting system, such as unmanaged land areas, or areas subject to activities not elected by a country. ~~For example, the C stock increase in AR lands afforested on a land category not included in the reporting will yield an apparent increase in soil C stocks but this C was transferred from the other land category and does not contribute to C removals from the atmosphere.~~

It is therefore good practice that the area between times t1 and t2 when calculating the C stock difference for each activity is identical. Furthermore, it is ~~therefore~~ good practice to conduct ~~all~~ the calculations of annual carbon stock changes and greenhouse gas emissions always for the area at the final year ~~end~~ of the ~~inventory year~~ period of estimate - i.e. the area at time t2 in the equation 2.5 of Chapter 2, Volume 4, 2006 IPCC Guidelines- and to use this approach consistently through time.