This disclosure describes coding transform coefficients associated with a block of residual video data in a video coding process. Aspects of this disclosure include the selection of a scan order for both significance map coding and level coding as well as the selection of contexts for entropy coding consistent with the selected scan order. This disclosure proposes a harmonization of the scan order to code both the significance map of the transform coefficients as well as to code the levels of the transform coefficient. It is proposed that the scan order for the significance map should be in the inverse direction (i.e. from the higher frequencies to the lower frequencies). This disclosure also proposes that transform coefficients be scanned in sub sets as opposed to fixed subblocks. In particular transform coefficients are scanned in a sub set consisting of a number of consecutive coefficients according to the scan order.