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Colin Reid* (colin.d.reid@newcastle.edu.au). *Compactly generated subgroups of totally disconnected, locally compact groups.*

Much of the theory of totally disconnected, locally compact (t.d.l.c.) groups is based on an interplay between large-scale structure (which is of a 'geometric' nature in the sense of geometric group theory) and the small-scale 'local' structure (that is, the structure formed by the compact open subgroups). There is also a third 'regional' scale, that of the compactly generated subgroups of a t.d.l.c. group; these turn out to have some surprising restrictions on their structure, which in turn affects how they can fit together to form an arbitrary t.d.l.c. group. I will talk about some recent progress on developing this 'regional' approach to the theory of t.d.l.c. groups. (Received March 20, 2017)