Weak Stationarity in Nonsmooth Optimization

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A weakened stationarity notion is presented. Being defined in terms of the primal space elements it appears to be the exact counterpart of the (dual) necessary optimality conditions in terms of strict (or limiting) subdifferentials and normals: these necessary conditions become also sufficient (for weak stationarity).

From the other hand, weak stationarity is strongly related to (the absence of) metric regularity of some mappings.