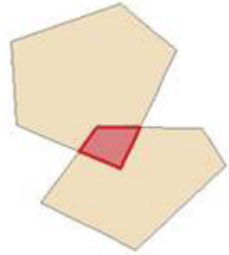
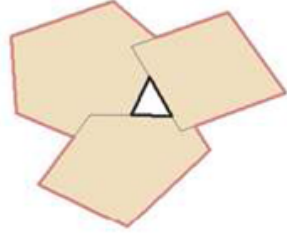


S.no	Topology Rule	Rule Description	Example
1	Must Not Overlap	Requires that the interior of polygons in the feature class not overlap. The polygons can share edges or vertices. This rule is used when an area cannot belong to two or more polygons. It is useful for modelling administrative boundaries, such as building plots, districts, and mutually exclusive area classifications, such as land cover or landform type.	
2	Must Not Have Gaps	This rule requires that there are no voids within a single polygon or between adjacent polygons. All polygons must form a continuous surface. An error will always exist on the perimeter of the surface. You can either ignore this error or mark it as an exception. Use this rule on data that must completely cover an area. For example, Land Uses polygons cannot have gaps.	

The following definitions clarify the subject of the DEWA's GDS:

**Polyline:** A polyline is a sequence of joined vertices. Each vertex has an X and Y. Attributes further describe the polyline. A polyline must be uniquely identified and duplicates are not permitted, unless the justification for a duplicate is provided by the Data Submitter.

**Polygon:** A polygon, like a polyline, is a sequence of vertices. However, in a polygon, the first and last vertices are always at the same position. Overlapping polygons are not permitted, unless the justification for any overlap is provided by the Data Submitter.

**Dangle:** Dangles are topological errors where an arc or a line does not end at the point where it should. These are created due to improper digitization. Dangles are of two types- overshoots and undershoot. Dangles can be avoided if proper Snapping tolerance is defined before starting digitization. Dangles are not permitted, unless justification for any dangles is provided by the Data Submitter.

**Undershoots:** When an arc or a line finishes before connecting to another arc at a required location it is called as undershoot. Undershoots can occur when a line feature (e.g. a road) does not exactly meet another feature to which it should be connected. Undershoots are not permitted, unless justification for any undershoot is provided by the Data Submitter.

