Annex L - Splits & Merges

Splits and Merges on Stage Rally events

The Motorsport UK Year Book makes several references to split and merged junctions as follows:

29.3 If a section of road is used twice on stages where the route divides, or where two roads merge, the junction itself should be clearly marked by a white board at least 76cm x 61cm illustrating the junction.

29.3.1 Figures on this board should be at least 15cm high.

29.3.2 The junction should be preceded by a similar diagrammatic sign in advance of Motorway type count down boards with diagonal bands positioned approximately 100m and 200m before the junction.

29.3.3 Judges of Fact should be placed at any split junction to note and report for penalty any Competitor overshooting and reversing back against the route of rally traffic.

29.4 Where stage routes merge on a lapping stage, the angle between the two roads (prior to the common route) should be no more than 45° to each other, and on joining should run separately, but in parallel, for at least 100m before merging.

29.4.1 Signs will be shown to Competitors as follows. These signs should have a minimum size of 76cm x 61cm. See Annex 1, Drawing number 29.4.1.

These regulations are most helpful when planning to run a single venue or a stage with a split &/or merged stage. As with all motorsport safety planning you need to consider the three key groups:

- Officials,
- Competitors
- Media and
- Spectators

Officials

1. Where will they park?
2. Where should they stand?
3. What is the procedure to follow if any element is damaged and may need to be replaced?
4. Make sure you have space for your Judge of Fact who will need to be located here.

Competitors

5. Is the approach clear?
6. Does the road book/tulip clearly reflect what is on the ground?
7. Is the approach speed appropriate?
8. Is the merge distance sufficient (at least in compliance with R29.4)?
9. Is there sufficient width for two cars to run in parallel?
10. If visibility, particularly at merges is compromised, consideration must be given to increasing time gaps between competitors.
Spectators
11. Is there anywhere suitable for them to stand at this location?
12. Is it far enough away?
13. Do you have sufficient signage and notices of the right type?
14. If no suitable area for spectators how will you manage this?

SPLITS

Where the route divides:
1. Is the junction clearly marked by a white board in compliance with R29.3 (76cm x 61cm)?
2. Are the figures on the board of sufficient height, a minimum of 76cm x 61cm – R29.3.1 (15cm)?
3. Ensure you have sufficient countdown boards to comply with R29.3.2

Typical setup arrangement:

In some locations, the main split board is positioned in the centre of the road (unless it was a hazard) and one lap competitors would go to the left and the other to the right etc. with a dividing line after this board to avoid competitors crossing back into a lane they might have wanted to go into and took the other in error. In this instance, there would only be one set of advanced boards normally on the left-hand side.
If there is no lane separator prior to the split, it is a good idea to introduce a chicane before the actual split, in order avoid competitors positioning themselves on the “wrong” side of the road in order to get a better approach to the junction.
MERGES
Where the route merges:

1. Is the junction clearly marked by a white board in compliance with R29.3 (76cm x 61cm)?

2. Are the figures on the board of sufficient height, a minimum of 76cm x 61cm – R29.3.1 (15cm)?

3. Ensure you have sufficient countdown boards to comply with R29.3.2

4. Is the angle between the two roads no more than 45° to each other R29.4?

5. Remember that on joining, the two routes should run separately, but in parallel for at least 100metres before merging – R29.4.

Typical setup arrangement with a chicane preceding the merge

At some venues, for example race circuits, the merge is on the circuit and on a straight section which doesn’t warrant having a chicane as shown above, and in this instance a large merge board could be used in the centre of the 2 lanes at the point where the 100m dividing line finishes.