

# MTBO Course Planning Guidelines

## Navigational Standards

There are two standards of navigation in relation to MTBO course planning, easy and hard.

## Planning aspects common to all forms of MTBO

1. Fairness is paramount. i.e. minimise the possibility of riders taking unmarked tracks and short-cuts. Riders are not allowed to ride off tracks, except on areas of mapped yellow and sometimes grey, if the event organiser permits such action.
2. Select an assembly area which provides plenty of room for car parking and pre-event preparation. Be very careful about using tracks in the assembly area as part of the courses. Safety should be paramount. Marshals may be necessary.
3. Ideal finish is slightly uphill. Also allow sufficient distance for riders to pull up safely.
4. Avoid legs that encourage riders to ride down single or narrow tracks in opposite directions. Not an issue on wide roads with good surfaces.
5. Avoid legs that could bring riders into conflict with private land-holders, or environmentally sensitive areas, such as marshes or erodible tracks. Planners need to be aware of requirements of land managers.
6. Crossings of major roads should only occur on straight stretches of road, with good visibility in either direction. Placing a control just prior to the road crossing is a way of slowing riders down, before they go out onto the road. Sometimes a marshal may be necessary.
7. The course is measured on the 'shortest possible track route' NOT 'as the crow flies'.
8. Climb is the number of contours crossed on the optimum route, and is expressed in metres.
9. Control markers are hung beside the track so that riders do not have to leave the track, or dismount, in order to punch. I.e. not too high, or too low.
10. Provided that the control marker is hung accurately (for distance), the marker can be hung anywhere along the track. i.e. it is not necessary to hang the marker on a definite feature.
11. The start triangle should be a definite point, on the map and on the ground.
12. Courses should generally run in the same direction.
13. Wherever possible courses should be set to minimise the element of luck.
14. Courses are set to achieve certain winning times applicable to age categories. Looking at past results in similar areas will provide information to calculate the course length required.
15. The terrain and its track systems really dictate what sort of course you can set. Divide the map into areas, bland areas for long legs, steep areas for route choice and detailed areas for short legs.
16. Be constantly aware of the speed of the best bike riders and how that speed can affect the safety of other riders.

## Hard Courses

1. Within the category of hard courses, there are two standards. Open standard for MTBO riders 18 to 49 where few areas of the map are off limits. The second standard is restricted, which is aimed at the 17 years and under, and over 50 years age classes.
2. Restricted courses should avoid really rough tracks, dangerous areas, steep ascents and descents.

## Legs for Hard Courses

1. The navigational skill, concentration and cycling ability of the riders should be tested.
2. The leg is the most important aspect of any course. The control markers are simply checkpoints along the way.
3. Each control should have a purpose; be the start of a good leg, or the finish of a good leg.
4. A variety of leg lengths and changes of direction are essential, map permitting. A leg which does not even change direction is generally a wasted leg.
5. Use steeper areas and complex track systems to set navigational challenges, long fast legs and short technical legs.
6. Generally every leg should have more than one route choice. Adding a short leg can sometimes set up a better route choice leg. Remember, at the end of the race, it is the different route choices which create the most discussion.
7. Do not be frightened of setting really long legs, but **only** if there is route choice. Be aware that the best riders will not go as wide as others. They know that they can ride the rough tracks fast. Be familiar with how far riders will go out of the way to avoid climb, it can be a long way.
8. Be prepared to offer a change of map to make best use of a small map and sometimes make extra use of good detailed areas. A map change control must not be used on any other course.
9. Do not worry about large maps which have to be re-folded during the course. It is the same for everyone.
10. Be careful of course crossovers causing confusion.
11. Try to set legs where cheating will not be rewarded.
12. Dog-legs in course planning are acceptable in MTBO.
- 13.

## Controls for Hard Courses

1. Control markers must not be hidden.
2. Do not place control markers in areas of low visibility, behind bushes, etc.
3. Do not place controls on steep slopes, up, or down or on main roads.
4. Do not place consecutive control numbers, or conflicting numbers,( e.g. 69 and 96) within 400 metres of each other.
5. Do not place any control marker within 150 metres (along tracks) of another control.

## **Easy Standard Courses**

Easy courses are meant for beginners, young riders and inexperienced or unfit riders.

- Length 8 – 12 km
- Simple route choice
- No crossing of main roads
- Obvious routes do not go into dangerous areas, steep ascents or descents, or really rough terrain
- No controls on steep slopes
- No requirement to locate overgrown or indistinct tracks
- Dog-legs in course planning are acceptable in MTBO

## **Key skills on easy courses**

- Setting up on bike
- Map orientation (use of compass)
- Use legend
- Rough distance estimation
- Checking control number
- Punch in correct square (where necessary)
- Simple route choice and route simplification
- Very basic contour recognition

## Winning Times

For MTBO events which are part of the Rider of the Year (ROY) series five courses are to be planned.

Course lengths are based on winning times i.e. the winner should complete their course in a particular time.

Course	Age Classes	Winning Times			
		Old Champs	Long	Middle	Sprint
1	Men Open	120 min	100	60	25
2	Women Open, Men 40-49	100 min	80	50	20
3	Men 50-59, Women 40-49 Men 17-20	90 min	70	40	20
4	Men 60+, Women 50-59, Women 17-20	80 min	60	35	18
5	Women 60+, Men -16, Women -16	70 min	50	30	15

Usually three social classes are offered for those who are inexperienced, or who want to ride in groups. Social Long should be allocated against Course 1, Social Medium against Course 3 and Social Short against Course 5.