

2. Event Planning – Course Planning



Event Planning - Course Planning

Learning Objectives

- **At the completion of this module the Controller will be able to:**
 - Obtain the required knowledge on principles of course planning and the requirements of the different event formats to ensure these can be correctly applied to the courses for an event
 - Obtain the skills and tools used to analyse courses to ensure they meet the required standards (e.g., difficulty, winning times)
 - Understand the process required to manage the course review from draft to final versions

Course Planning Activities

Course Planning Activities:

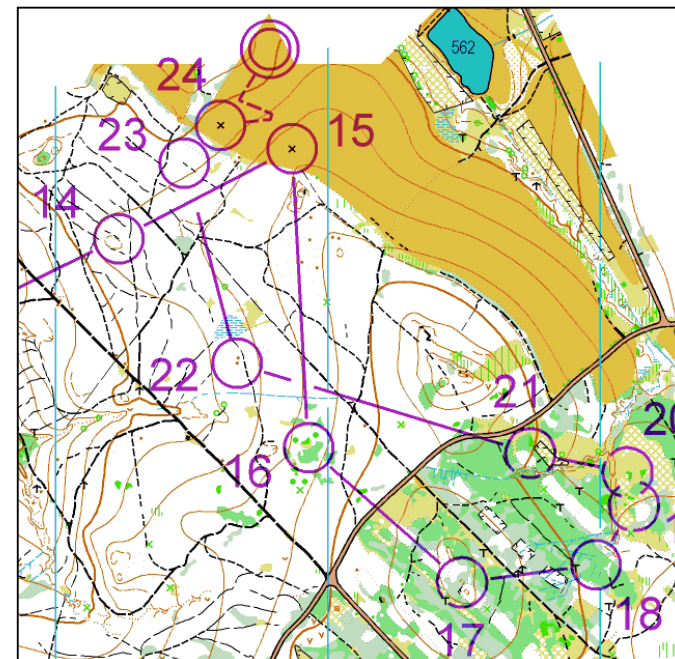
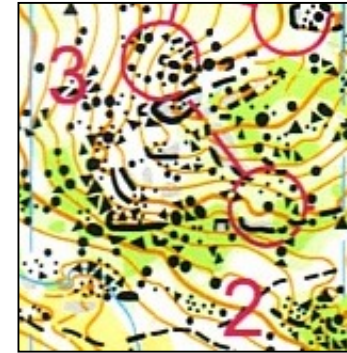
- familiarisation with course planning guidelines
- confirm course specifications for event
- initial review of courses on paper
- field check after course planner has taped sites
- integrate changes resulting from field check
- check all master maps, control descriptions etc
- check control marking devices (punches, SI units)
- review all control sites after control placement
- integrate any changes after final control check

SUMMARY TABLE	Sprint and sprint relay	Knockout Sprint	Middle Distance	Long Distance	Forest Relay
Controls	Technically easy, minimum 25m apart	Technically easy, minimum 25m apart	Consistently technically difficult	A mixture of technical difficulties	A mixture of technical difficulties
Route Choice	Difficult route choice, requiring high level of concentration	Difficult route choice, requiring high level of concentration	Small and medium scale route choice	Significant route choice including some large scale route choice	Small and medium scale route choice.
Type of Running	Very high speed	Very high speed	High speed but requiring runners to adjust their speed for the complexity of the terrain	Physically demanding, requiring endurance and pace judgement	High speed often in close proximity to other runners who may, or may not, have the same controls to visit
Terrain	Very runnable park, streets or forest. Spectators may be allowed along the course.	Very runnable park, streets or forest. Spectators may be allowed along the course.	Technically complex terrain	Physically tough terrain allowing good route choice possibilities	Some route choice possibilities and reasonably complex terrain
Map (as per rule 15)	1:4000 or 1:3000	1:4000 or 1:3000	1:10000 or 1:7500	1:15000, 1:10000 or 1:7500	1:10000 or 1:7500
Start Interval	1 minute (mass start for relay)	1 minute for qualification round. Mass start for knock-out rounds	2 minutes	2 minutes	Mass start

Event Formats and Course Plan

SUMMARY TABLE	Sprint and sprint relay	Knockout Sprint	Middle Distance	Long Distance	Forest Relay
Timing	1 second (finish order for relay)	1 second for qualification round. Mass start for knock-out rounds so the finish order is the order across the line.	1 second	1 second	Finish order across line
Winning Time	12-15 minutes (per leg in the relay)	8-10 minutes for the qualification round. 6-8 minutes for the knock-out rounds.	30-35 minutes	See rules 16.9 and 16.10 and 16.11	40 minutes; See rules 16.10 and 16.13
Summary	Sprint orienteering is a fast, visible easy-to-understand format allowing orienteering to be staged within areas of significant population. The Sprint Relay is a competition for teams of four runners. Teams contain at least two women and the first and last legs are run by women.	In a Knock-Out Sprint, after initial qualification, there are a number of knock-out rounds with mass starts and first-past-the-post finishes. The races take place in a compact area. Exciting for spectators and competitors.	Middle distance orienteering requires fast, accurate orienteering for a moderately long period of time. Even small mistakes will be decisive.]	Long distance orienteering tests all orienteering techniques as well as speed and physical endurance.	Relay orienteering is a competition for teams of three runners running on a virtually head-to-head basis with a first-past-the-post winner. Exciting for spectators and competitors.

- Courses should be correctly designed for the expected abilities (technical and physical) of participants
- Orienteering is running navigation, terrain needs to be runnable
- Fairness - Course planner needs to ensure that the contest is fair, all competitors face essentially the same conditions on every part of their course, i.e. eliminate the element of luck
- Competitor enjoyment - orienteers need to be satisfied with the courses they are given, course is suitable for the competitors
- The course planner needs to be fully acquainted with the terrain
- Courses should be set that normally fit competitors can run over most of the course set for their level of ability
- Protection of wildlife and the environment
- Consideration for spectators





Components of the Course



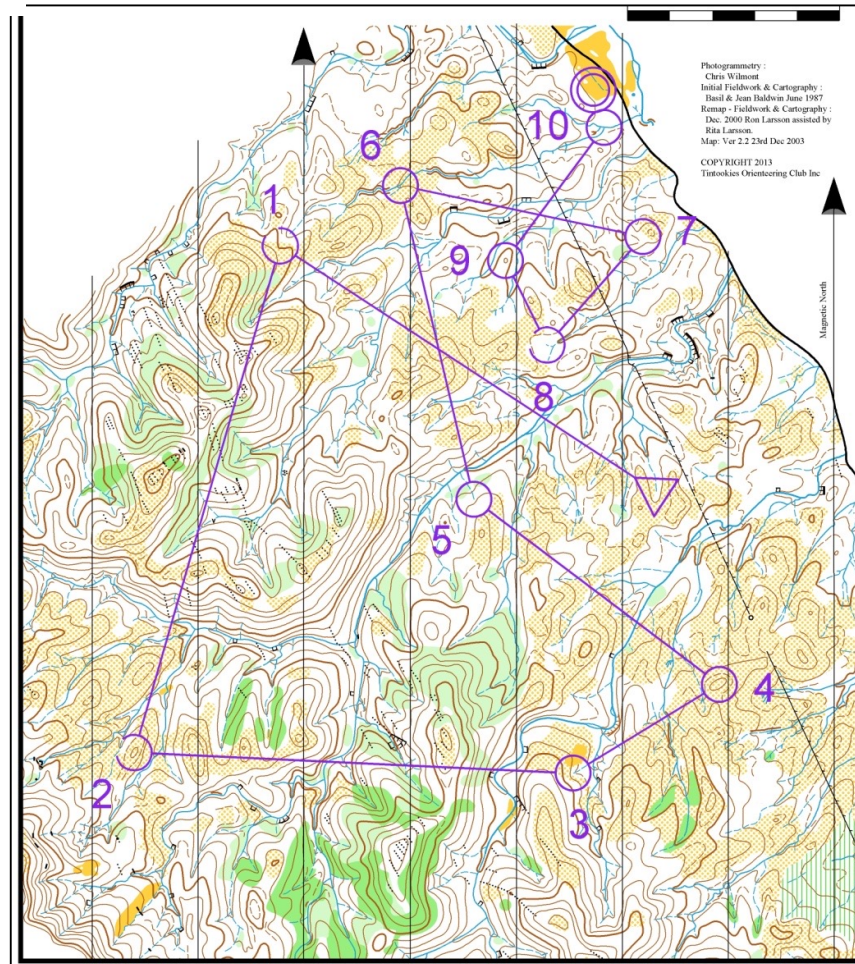
Reference: OA Foot Rules Appendix 2

- Start – mark by a control flag, course begins then
- Terrain
- Legs - fairness
- Controls
- Climb - < 4%
- Finish
- Elements of map reading
- Route choices
- Degree of Difficulty – Hard, Moderate, Easy, Very Easy

Long Distance Course Format

- 90 mins for 21E, 75-80 mins for 20E, 70 -> 40 mins for older classes
- Physically demanding
- Format emphasises route choice, including large scale route choice (splits competitors)
- Control is end point of long leg, may not in itself be difficult
- May include more technical sections characteristic of Middle Distance
- Element is long legs still requiring full concentration on map reading, e.g. 1.5 – 3 km on elite courses, 1 – 1.5 on shorter courses (ensure map reading and conc. still required)
- Test all orienteering techniques
- 1:10,000 and 1:15,000 scales. Provision for larger scales (1:7,500) for young and older age classes M/W35+, and all AS, moderate, easy or very easy courses

Long Distance Example – Hard Course

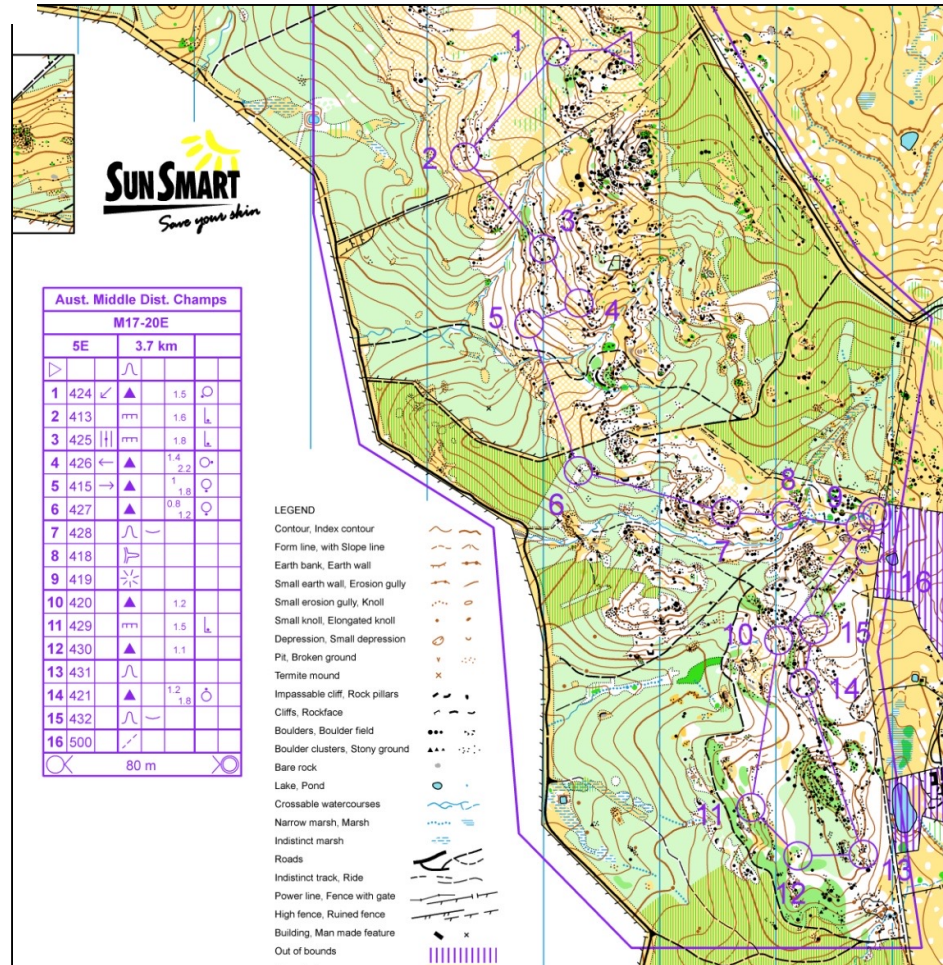




Middle Distance Course Format

- Profile is technical – 30-35 min winning time
- Emphasis on details navigation
- Requires constant concentration on map reading
- Shifts in running direction out from controls
- Shifts in speed through varied terrain types
- Small and medium scale route choice
- Controls themselves are technical
- Map scale is commonly 1:10,000 scale (map is a strict enlargement of a 1:15 000 scale map). Enlargement to 1:7,500 allowed for M/W35+, AS, moderate, easy & very easy courses

Middle Distance Example





Relay Format



- Team competition
- Mixture of technical difficulties
- Elements of Middle and Long – route choice allows separation of runners
- Forking – but ensure fairness
- Last part of legs generally common
- Spectator friendly
- Enjoyable for competitors



Relay Example




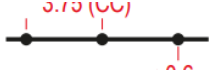


- Relay course setting purple pen



Sprint Distance Format

- Profile is high speed – winning time 12-15 mins (aim for middle of range)
- Commonly urban
- Tests ability to read complex maps and make route choice decisions and implement them at high speed
- Map scale is 1:4,000 or 1:3,000 scale, ISSprOM 2019 map specification.
- Provision for larger scales (1:3,000) for young and older age classes M/W35+, and all AS, moderate, easy or very easy courses
- Controls are technically easy and should not set traps, aim is to test ability to choose and complete the best route
- Out of bounds areas and features not to be crossed need to be considered in course planning, don't set legs that encourage these to be crossed
- Safety considerations as events commonly urban
- Also consider guidelines for multi level structures

ISSprOM Specific Symbols

Symbol	Colour	Meaning
	Black	Passable fence
	Black	Impassable fence
	Black	Passable wall
	Black	Impassable wall
	Medium grey	Building – not to be entered
	Light grey	Canopy – may be passed under
	Black	Steps of a stairway
	Dark Green	Impassable vegetation – not to be crossed
	Olive Green	Forbidden access (as for “forest maps”)
	Pink	Temporary construction / restaurant

Line thicknesses and spacing are critical!

Sprint Distance Example

WAITE CAMPUS

SCALE 1:4000 2m CONTOURS

National Orienteering League Event # 1
SA Sprint Championships
SA Orienter of the Year Event # 1
9 March 2013

2013 SILVA NATIONAL ORIENTEERING LEAGUE ROUND 1: final race

NOL Event 1B, SA Sprint Champs, 9 March 2013			
M21E, M17-20E, M17-20A			
M35A			
	1	2.9 km	50 m
▽		■	⊥
1	164	⊥	⊥
2	152	↗	⊥
3	176	⊥	⊥
4	173	⊥	⊥
5	158	⊥	⊥
6	154	△	⊥
7	157	△	⊥
8	177	×	⊥
9	160	→	⊥
10	156	△	⊥
11	163	⊥	⊥
12	162	⊥	⊥
13	175	△	⊥
14	167	△	⊥
15	166	⊥	⊥
16	168	⊥	⊥
17	165	⊥	⊥
18	170	■	⊥
19	169	△	⊥
20	171	⊥	⊥

60 m

Considerations for Sprint

- Sprint measured as running distance, not straight line (need to measure each course)
- Difficulty –
 - Very easy – no route choice, strong features, short legs, avoid traffic
 - Easy – simple left/right route choice, strong features, avoid traffic
 - Moderate – multiple options, longer legs
 - Hard – complex legs with multiple route choice, difficult to determine optimum route.