## RECOMMENDATIONS FOR THE INSTALLATION AND MAINTENANCE OF B-NETS

The following recommendations are derived from collective observations and experience of race organizers, juries, technical delegates, F.I.S. officials (both volunteer and paid professionals) and race departments at various ski areas. They are neither intended nor capable of safeguarding racers given the inherent risks of alpine skiing race competitions and other forms of competitions or special events. The following considerations shall not be considered "standards," only best practices. The author and publisher of this document make no warranties, express or implied, with respect to the shock-absorption or decelerating capabilities of said products. These recommendations shall not serve as an official installation guide for any B-net system, and may not be considered as such by any party.

- 1. It is a generally accepted practice to place 1 B-net pole every 2 meters along the fence line. The Jury may make other recommendations as they see fit for the particular installation, it is then the duty for the race organizer to comply.
- 2. It is recommended that you not introduce inordinate tension on the net either horizontally or vertically through pole locations and clip placement along the poles. The fence should not be overly taut yet not saggy. Gaps between to bottom of the B-net and the snow surface should be closed to prevent objects from passing underneath.
- 3. A minimum of 60 meters of fence (ex. 3 x 20m sections, 4 x 15m sections or 2 x 30m sections) is recommended in order to engage what some feel is an adequate number of poles to do the work of decelerating a moving object. If protecting a specific immovable hazard, it's been observed that at least 40m of the 60m fence line should be above the object.
- 4. When combining sections of B-net, it's been observed that by overlapping the ends of the sections by at least 1 meter and weaving the tops and bottoms of both end poles (4 integrated connection points) through the corresponding sections of fence that are being combined, the risk of the fences coming apart is greatly reduced. It's recommended that the overlap be tested by aggressively pulling of the downhill side of the net junction to see if it stays intact.
- 5. Insert the B-net poles as deeply as possible (example: 12-14 inches) into the snow surface in order for the pole to bend without first coming out of the snow.
- 6. The B-net poles should be installed in a perpendicular fashion to the slope angle, and facing slightly inward towards the course (10 15 degrees toward the race course).
- 7. Routine inspection and tightening the clip hardware where needed is recommended (levers, wing nuts or screws if used), and to check them upon each installation. If hardware is missing, replace it immediately.
- 8. If broken poles, broken or missing clips, missing hardware or rips in the net itself are discovered, you may want to consider not using that section of fence until it can be repaired or replaced. If it must be used, consider placing it as the secondary or tertiary row where the Jury deems such additional rows are needed.
- 9. Best practices call for adequate space between a row of B-net and the object(s) being protected. As a general rule, 4 meters of distance between net and object is recommended.
- 10. If the Course Homologation or Inspection Plan indicates more than one layer of B-net at certain locations along the track, it's been observed that the spacing between rows of B-netting should be from 2.5 meters to 4 meters apart, as space dictates. It is suggested that the organizer rely upon, and follow, the Jury's best judgment in determining B-net row spacing.
- 11. If the course Homologation or Inspection Plan does not specify B-net placement, the organizer should rely upon, and follow, the Jury's best judgment to determine proper location of B-nets, spacing between nets and hazards, and spacing between layers of netting if applicable.
- 12. Whenever possible, it is recommended that the fence system be removed from the hill and stored away from sunlight and moisture in between winter seasons. Minimizing exposure to sun (UV-ultra-violet) and moisture will extend the service life of the product.
- 13. If weather conditions change from day to day during a multi-day event, recheck the B-net installation prior to training or racing begins. Look for: proper insertion of poles in the snow surface, removal of any snow build up, intact hardware, junctions between sections of the nets, and broken poles or rips in the nets. Replace any broken poles, ripped nets or missing hardware.
- 14. If weather forecasts call for high winds at night, consider lowering the net towards the snow surface to mitigate wind drag on the fence system. Bundling the netting between poles with twine or bungee straps will help keep it gathered and minimize the chance of wind catching the net and dismantling the system.
- 15. If heavy snow is forecast, consider raising the bottom portion of the net 1 meter up on the poles to allow course workers to perform snow removal, then resetting the nets to their proper position on the snow surface in preparation for training and racing.