

## Guidelines for wind protection on the jumping hills

- Wind protection shall be constructed on both sides of the jumping hill on the places most needed from E2 to HS. If more than 65 % of the wind comes only from one side of the hill, then only the side of prevailing wind can be protected.
- The best experience for wind protection so far is with wind nets.
- Wind nets construction (when the nets are in place) must resist at least gusts of 15 m/s and permanent wind of 12 m/s. If there is more than 10 m/s wind the atmosphere is too turbulent for safe ski jumping and the nets can be packed together.
- Wind protection system must reduce the wind speed on the jumping hill by 70 %. If the average wind speed outside the wind nets is 10 m/s, then on the jumping hill in the height of flight trajectory may be maximally 3 m/s.
- Permeability of the wind nets shall be maximally 30 % at 10 m/s wind speed, max. 50 % at 6 m/s and max. 60 % at 3 m/s).
- Height of the wind nets: shall provide adequate wind protection for the whole landing area. From the experience and from the wind tunnel measuring we know that the turbulent area behind the wind nets is approaching the ground with approximately 30 % inclination (10 m high wind net protects about 30 m distance on the ground behind the nets).
- There are companies specializing in wind protection services that equip World Cups, World Championships and Olympic Games with permanently or temporarily installed wind protection systems. Due to the cooperation with athletes, officials and organizers, the wind protection systems are constantly being further developed through experience, know-how and digital support in order to be able to offer the optimal solution for every event based on the latest state-of-the-art technology for wind protection systems.