The Norwegian Tunnelling Society with its 1060 personal- and 65 company members has accomplished another active year with good progress in distributing the latest development in rock excavation techniques. Main events of the year was the annual Rock Blasting conference and various courses and seminars related to underground technology in general and rock excavation in particular.

There are five permanent committees covering Shot firers, Development, International Activities, Information & Public Relations and finally Conferences. Each of these appoints sub-committees (task forces) to cover specific projects. International Committee is responsible for ITA-matters, support the participation in ITA Working Groups and international conferences in general. The Development Committee initiates technological projects. During 2010 focus has been on health and safety as well as technology related to water proofing in tunnels. The Committee for conferences is responsible for arrangements, this year three. "Information" is promoting recruitment to the rock blasting and tunnelling profession as well as strengthen the image of the profession in general. The objective is to distribute correct and positive information on construction activities at large. The shot firer committee is arranging short courses for personnel from smaller companies involved in rock blasting as well as an annual 3 day seminar covering the latest techniques and is giving an update on new rules and regulations concerning rock blasting.

Tunnels and caverns under construction

- New railway tunnel between Sandvika and Lysaker, 5,5 km double track tunnel
- Frodeåsen railway tunnel, Tønsberg, 4 km double track tunnel
- Gjevingåsen rail tunnel, Trondheim, 5 km single track tunnel
- E6 Øyer Tretten, road tunnel
- The T connection, 9 km subsea roadtunnels
- Ryaforbindelsen, 5 km subsea road tunnel
- Lørentunnelen, 1 km underground road system
- RV 64, The Atlantic ocean tunnel
- Kvivstunnelen, road tunnel
- Vossapakko, road tunnel
- Kjøsnesfjorden HEP, about 25 km of small section tunnels and shafts
- RV 48 Helland Havsgaardsdalen, road tunnel
- Jøssingfjord underground hydroelectric power project
- Rendalen HEP
- Øksendalsoverføringen water transfer tunnel
- Johndalstunnelen, road tunnel
- Storforshei, access tunnels for mine development
- Fv 78 Toventunnelen, road tunnel
- Many smaller projects

During the year 2010 the underground activity in Norway increased with nearly 90 % compared to the year 2009. Excavated volume from underground openings

reaching about 4,5 mill. m<sup>3</sup>. Total length of underground openings was in the range of 73 km. Excavation of road tunnels was by far the biggest sector with more than 3,4 mill. m<sup>3</sup> followed by hydro power tunnels with a volume of 0,4 mill. m<sup>3</sup>.

The outlook for 2011 is that there will be an increase in the rock excavation activity compared to 2010. Several railway and road tunnels are in the final planning stage and the Government is boosting their early start up.