



Gestionnaire
du Réseau de Transport d'Electricité

Transition joints

Why transition joints ?

- Improve the use of underground cables in France
 - Better adjust the underground cable section to environmental constraints
 - Decrease the lump sum of the line
 - Make easier economic acceptability of the links

- Make easier operations on existing lines
 - Cables which are no more manufactured
 - Use of new cables with better performances

Transition joints

- Joints between dissimilar cables:
 - Different sections
 - Different synthetic insulations
 - Different sheath

Actions

- A new process was established with EDF R&D to optimise qualification costs and delays of the transition joints, using existing joints
- A new dedicated test area was built to check the equipment performance



Application

- Application on 90 kV taped joints, for a new UGC
 - 12 km length
 - First chosen section incompatible with current rating due to environmental constraints (drillings)
 - A greater cable section for the whole line : too expensive for the project.

The use of transition joints allowing section jumps appears to be a correct solution to these problems.