

# **DC stray current corrosion criteria: Summary of GERG 2.51 and GERG 2.63 projects**

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## **Abstract**

Criteria given in EN 50162 on DC stray current corrosion are debated based on investigations made in GERG projects 2.51 and 2.63 completed along with major European pipeline operators. Experimental programmes have been completed in laboratory soil boxes correlating corrosion rates with electrical fingerprints in various chemical environments and under different electrical conditions including both DC (simulating DC stray currents) and AC (simulating superimposed AC induction). Pure DC interference has been shown to create both an active state of corrosion and a passive state with low corrosion depending on interference periods and CP conditions. AC has been shown to affect a tolerable cathodic interference.