

**Ground Effects Topical Group (GETG)
Summary at the SWWT general meeting
19 Nov 2014, Liège, Belgium**

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GETG covers a wide range of activities such as, but not limited to:

- Modelling geomagnetic variations and geoelectric fields
- Modelling GIC in electric power systems (discrete grounding), buried pipeline networks (continuous grounding), railway equipment, ...
- Measurements of geomagnetic variations, geoelectric fields and GIC
- Development of forecast techniques of geomagnetic storms and GIC
- Analysis of extreme events
- Risks and hazards from an insurance and social perspective
- Public outreach

Activities since ESWW10

EURISGIC (European Risk from Geomagnetically Induced Currents)



EU/FP7 project, Mar 2011 - Feb 2014

FI + UK + SE + HU + RU + US + advisory group

Additionally, national activities

- Recordings
 - GIC (mostly power grids)
 - Long-term measurements of the geoelectric field
- Extreme events
 - Extrapolated geomagnetic statistics
 - Simulations of 'what if' events (Carrington, July 2012, ...)
 - Mid-latitudes can experience events comparable to (sub)auroral latitudes
- National studies with power grid operators
- Development of space weather services with $d\mathbf{B}/dt$ and GIC nowcasts/forecasts as one product (national efforts, ESA projects)
- Actions by power grid operators
 - Assessments of GIC effects
 - GIC considered as one aspect when designing new substations

More details at the splinter session on Friday (21 Nov at 16:30-18)