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# Technical Rule – Standard DVGW GW 381 (A) May 2015

Building Companies for Underground Line Construction – Minimum Requirements (identical with AGFW FW 600 and VDE-AR-N 4220)

Bauunternehmen im Leitungstiefbau – Mindestanforderungen (identisch mit AGFW FW 600 und VDE-AR-N 4220)

GAS WATER

FNN FORUM NETZTECHNIK/ NETZBETRIEB IM VDE



The DVGW is the technical and scientific association of gas and water engineers and comprises approximately 14,000 members. For more than 150 years, the DVGW has been setting the technical standards for the safe, secure and reliable supply of gas and water, actively initiating the exchange of ideas and information in the gas and water sectors and encouraging and promoting on-going progress in the sectors through practical guidance.

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- While the DVGW Set of Rules is not the only source of knowledge when looking for professional solutions, it does constitute an important source of such knowledge. It cannot however cover all possible special cases that may require more comprehensive or restrictive measures.

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### Foreword

This Technical Rule (AGFW Standard, DVGW Standard, VDE Application Rule) has been prepared by a project group with representatives from the district heating, gas, power, telecommunications and drinking water sectors. The project group was supported by the following partners, in addition to the voluntary and full-time representatives of the AGFW, DVGW and FNN:

- Deutsche Telekom AG
- Gütegemeinschaft Leitungstiefbau e.V.
- Hauptverband der Deutschen Bauindustrie e.V.
- Rohrleitungsbauverband e.V.
- Zentralverband des Deutschen Baugewerbes e.V.

This is the first time that a technical rule specifies, across all sectors, minimum formal, personnel and technical requirements as well as optional criteria to be met by companies for underground construction for lines.

Over time, the different sectors and the legally responsible road construction authorities have developed their own specific requirement profiles for such companies. The different sectors do, however, share an almost identical approach to underground construction for lines, including the applicable legal provisions, from road-breaking to trench construction and backfilling through to road surface restoration and the necessary traffic safety precautions. The obvious thing therefore was to pool all requirements and create a standardised reference for all parties involved.

Concerning the construction of the line itself and everything associated with it (in particular sector and construction-specific cables/pipes/coatings, joints/connections, depths of cover, distances, bedding conditions as well as the associated installation/assembly techniques, precautionary measures and qualification requirements), all specific technical rules and legal provisions continue to apply unabated. This refers to both the open-trench method as well as, and in particular to, the different trenchless methods, some of which require meeting special requirements in respect to the aforementioned aspects. Different methods are frequently combined (e. g. open-trench for supply lines and soil displacement hammer for service lines).

Of course, all applicable technical rules and legal provisions are to be observed and all works are to be carried out by properly qualified personnel using appropriate work equipment. Contractors may furnish

proof of meeting the minimum requirements by way of a conformity assessment as requested by the ordering party (e. g. a pre-qualification assessment by the ordering party, a quality association or independent third-party certification).

Legal provisions stipulate that the ordering party performing the conformity assessment of companies for underground construction for lines in accordance with this technical rule must include in the selection process – considering all legal provisions applicable to it – contenders that will meet the requirements of this technical rule only by way of subcontractors.