

# Standards. Air Quality. Modelling.

## Promoting harmonisation in the field of air quality in Germany through standardisation

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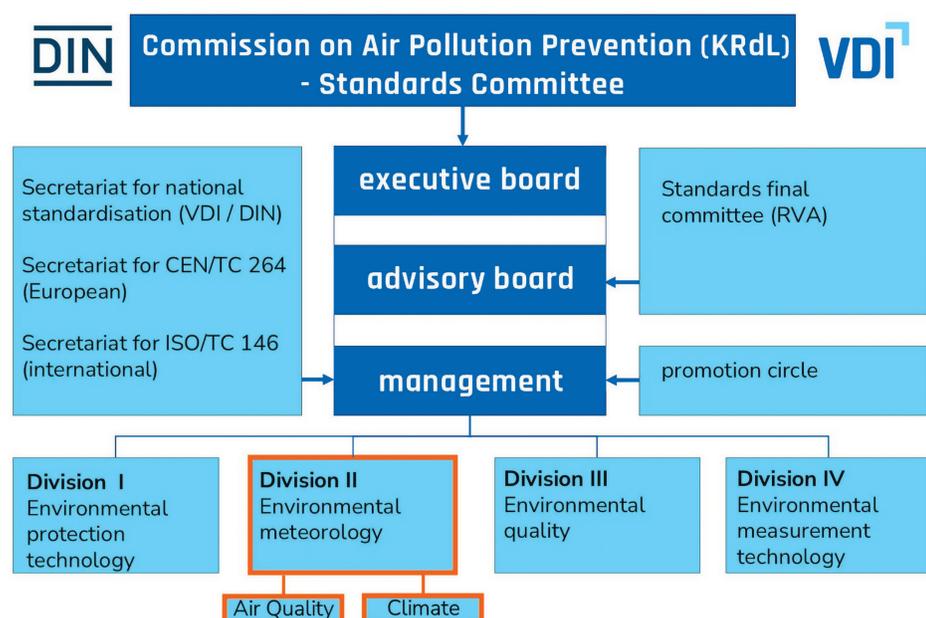
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### Introduction to the KRdL

Air pollution control is crucial to protect people's health and the environment. Setting and applying standards to evaluate present and future air quality conditions creates a consistent and harmonised basis for assessment methods. At the European level, a major milestone was the adoption of the directive on "ambient air quality assessment and management", which built the framework of legally binding, cross-border regulations for air quality assessment.

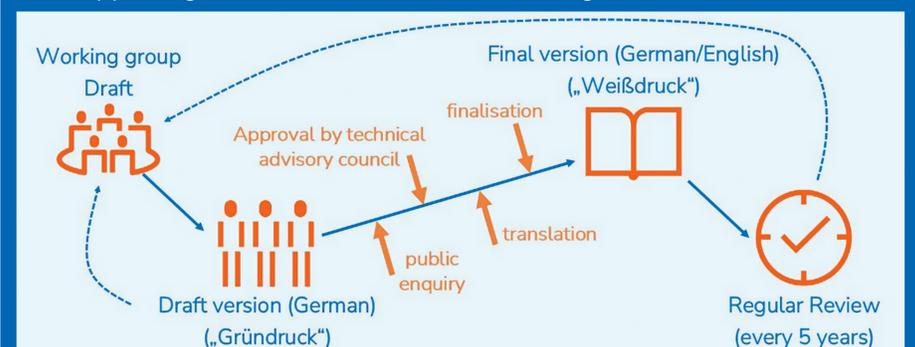
In Germany, foundational work began with the establishment of the Commission on Air Pollution Prevention (KRdL) in 1957 – from 1990 a joint committee of VDI and DIN. From the outset, the KRdL was tasked with supporting the Federal Ministry for the Environment (currently BMUKN) by developing science-based practically applicable standards that could be formally integrated into legislation and regulatory frameworks. In addition to VDI Standards, KRdL's work also includes the development of DIN, CEN, and ISO Standards covering various aspects of air pollution control.



Division II "Environmental meteorology" develops standards relevant for meteorological and climatological applications related to environmental protection, with a particular focus on air quality. It is divided into two committees, "Air Quality" and "Climate".

### Development of a VDI Standard

The development of VDI Standards is a transparent process that ensures the participation of all relevant stakeholders, including government agencies, researchers, industry representatives, and NGOs. Participation in standardisation projects enables experts to translate scientific findings into practical applications, thereby promoting effective knowledge transfer and supporting evidence-based decision-making.



Due to the transparent and participatory development process, these VDI Standards are regarded as a recognised and broadly accepted professional foundation.

### VDI Standards in environmental meteorology

#### Climate

- Methods describing AQ for urban & regional planning at regional level
- Local cold air
- Urban development in view of climate change
- Human biometeorological requirements in the framework of recreation, prevention, therapy, and rehabilitation

#### Air Quality

- Meteorological measurements
- Emissions (gases, odors, dust from diffuse sources)
- Dispersion Modelling (gaseous & particulate trace substances, odorous substances, emissions from motor vehicles,...)
- Accidental releases
- Deposition
- Quality assurance methods

**Conclusions:** The KRdL develops standards to support governmental initiatives aimed at mitigating air pollution. All standards are developed bilingually in German and English. These standards operationalise EU directives at the national level, while also integrating supplementary national regulatory requirements. The collaborative involvement of diverse stakeholders – including governmental bodies, consultancy experts, industry representatives, research institutions, and non-governmental organisations – ensures the development of technically robust and broadly accepted standards. In the field of air pollution control, the existence of standardised regulations and methodologies is essential to ensure comparability of results and to maintain the integrity and reliability of data quality.



Learn more about Division II  
"Environmental Meteorology"