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## Soil quality — Field soil description

*Qualité du sol — Description du sol sur le terrain*



Reference number  
ISO 25177:2008(E)

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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 25177 was prepared by Technical Committee ISO/TC 190, *Soil quality*, Subcommittee SC 1, *Evaluation of criteria, terminology and codification*.

This first edition of ISO 25177 cancels and replaces ISO 11259:1998, which has been technically revised.

## Introduction

Traditionally, descriptions of soils and their environment were carried out as parts of soil survey and soil inventories, the purpose of which was to describe the pedogenetic context of the soil and assess applied aspects, principally agronomic potentials.

Today, many soil observations are made as part of much wider environmental studies, and include analysis for objectives such as the following:

- the identification of human influences on the soils, particular attention being paid to the negative effects of these influences (for example, pollution and physical deterioration);
- land protection within the context of “sustainable” agriculture;
- the prediction of the fate of contaminants introduced into the soil;
- the assessment of the consequences resulting from changes in the use of the soil;
- setting up monitoring programmes for specific purposes (observation of changes of soil properties in time);
- the development of spatial data bases (used in the context of GIS) aimed at facilitating the geographical representation of these;
- many other uses.

Therefore, this International Standard is based on aspects of the traditional approach to soil description [for example, the Guidelines for soil description FAO ROME (2006)]. The descriptions of soils and sites alone are not sufficient. Field and laboratory measurements, whether physical, chemical or biological, must accompany this description. Care must be taken in the specification of sites and in the methods of sampling and the number of samples. It is therefore imperative that this International Standard be considered in the context of other International Standards developed within the framework of ISO/TC 190, *Soil quality*.