#### 1. Title

Soil Monitoring for Mankind and Environment Safety

### 2. Type

Working Groups Symposium

### 3. Organizer(s) & Convener

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### 4. Rationale

Soil monitoring for mankind and environment safety,

The soil resource is essential in the provision of many ecosystem services. However, soils are under constant threat from many varied risks at a broad range of spatial scales. Although rates of soil degradation are often slow and only detectable over broad timescales they are often irreversible. Therefore, monitoring soil quality is essential in order to detect changes early on. This symposium will deal with current scientific issues and applications of soil monitoring.

# 5. Objectives

The main objective is to bring together soil scientists involved in the implementation of soil monitoring networks and pedometricians working on advanced techniques for sampling design and spatio-temporal analysis of soil monitoring data.

# 6. Description

There are many scientific issues related to soil inventory and monitoring that need to be addressed to ensure that networks will be able to detect change in soil over relevant spatial and temporal scales and that results from different surveys will be comparable. This symposium will address some of these generic issues including design and implementation of sampling in space and time, choice of relevant indicators, development of statistical techniques that are general enough to describe the complicated patterns of spatial and temporal variation of soil properties, and harmonization issues.







