BUSINESS PLAN
CEN/TC 223
SOIL IMPROVERS AND GROWING MEDIA

EXECUTIVE SUMMARY

Business environment

• Parties involved
  o soil improver and growing media manufacturers and their trade associations
  o horticultural industry
  o government departments (national and EU, including enforcement, advisory and regulatory bodies)
  o public and consultancy laboratories
  o consumer and environmental organizations

• Steady growth in the demand for soil improvers and growing media since the 1990s

• The most recent EU estimate of annual production (2007) found that over 37 million m$^3$ of growing media were produced in the EU; over 22 million m$^3$ of this was for the professional market and about 15 million m$^3$ for the hobby sector. Peat was by far the main growing medium constituent, accounting for 86% of professional GM and 69% of GM for the hobby market, a total of about 29 million m$^3$ in total.

• The application sectors include agriculture, horticulture, gardening, and landscaping and customers include the general public, as well as public and private sector bodies.

• The European Peat and Growing Media Association (EPAGMA) favours an EU-wide obligation to apply CEN/TC 223 standards as the basis for labelling and product declaration to facilitate pan-European trade and supports the development of an EC Fertiliser Regulation including soil improvers and growing media to bring this about.

Benefits

• Since 1999, 18 European Standards and 2 CEN Reports have been published

• Facilitating trade in soil improvers, growing media and their constituents by developing standardized methods of test that have the confidence of the industries that purchase and use these materials.

• Helping to eliminate barriers to trade in soil improvers and growing media in Europe and possibly beyond

• Consumer confidence and environmental protection in the manufacturer of soil improvers and growing media

• Facilitating the trade in treated organic wastes and hence implementation of waste legislation.
Priorities

- Participation in EC discussions on a revised and expanded EC Fertiliser Regulation incorporating soil improvers and growing media.

- Development of harmonised standards Mandated by the EC in support of the new Fertiliser Regulation if funded

- Revision and amendment to existing Standards identified during systematic reviews as appropriate
1 BUSINESS ENVIRONMENT OF THE CEN/TC 223

1.1 Description of the Business Environment

The following political, economic, technical, regulatory, legal, societal and/or international dynamics describe the business environment of the industry sector, products, materials, disciplines or practices related to the scope of this CEN/TC, and they may significantly influence how the relevant standards development processes are conducted and the content of the resulting standards:

Scope

Standardization of two types of principally organic material used in agriculture, horticulture, gardening and landscaping.

1) Soil improver (SI) – defined by CEN/TC 223 (in CR 13456:1999) as ‘material which is added to soil in situ primarily to maintain or improve its physical properties, and which may improve its chemical and/or biological properties or activity’. Examples include composted organic wastes such as green compost, manures and peat or bark.

2) Growing medium (GM) – defined by CEN/TC 223 (in CR 13456:1999) as material, other than soil in situ, in which plants are grown. The principle GM constituents in the EU are peat, wood derived fibres, coir, bark and composted materials.

Liming products and materials used solely as plant nutrients are excluded and these are covered by CEN/TC 260.

CEN/TC 223 was set up to facilitate trade in soil improvers and growing media by reducing barriers to trade through the creation of standards for all growing media and soil improvers; its work also enhances consumer protection and increases environmental protection.

These materials are used in agriculture, horticulture, hobby gardening and landscaping. They have even wider societal interest because the intended use of many treated organic wastes is as soil improvers and growing media. They are also of environmental/ecological interest because many soil improvers and growing media are made from primary raw materials, some of which are extracted from sites of ecological, archaeological and scientific interest.

There is widespread interest and support at the national and regional level from EU Members. Interested parties include soil improver and growing media manufacturers and their trade associations, the horticultural industry (professional plant growers), government departments (national and EU level including enforcement, advisory and regulatory bodies), public and consultancy laboratories, consumer and environmental organizations.

The uses for soil improvers and growing media include agriculture, horticulture (professional ornamental and edible plant growing), hobby gardening and landscaping. Customers include the general public, private and public sector bodies.

The industry comprises small, medium and large manufacturers; most (cross-border) trade is in higher value growing media rather than soil improvers - produced by medium-sized enterprises.
The importance of world-wide trade in related areas such as plants and crops will mean that some countries outside Europe may adopt the standards or modify existing standards produced by this committee. Interest in the work of TC 223 has already been shown from non-EU countries. A professional liaison is maintained at the international level with the International Society for Horticultural Science (ISHS), the Association of Official Analytical Chemists International (AOAC International) and with ISO/TC 190 Soil Quality. In addition, there is also liaison with the European Compost Network, the European Perlite Association and participation by the CEN Associate ECOS (European Environmental Citizens Organisations for Standardisation on the Committee).

1.2 Quantitative Indicators of the Business Environment

The following information describes the business environment in support of the actions of this CEN/TC:

Since the 1990s the demand for both peat and alternative materials has risen substantially. Overall, the demand for peat has risen due largely to the strong increase in demand for growing media (which for both professional and hobby use are still largely based on peat).

There is a large trade in container-grown plants and the success of these "production lines" is entirely dependent on the quality and reliability of the growing media. Considerable substitution of peat by alternative materials has also occurred in soil improvers in some countries, though in growing media the consistency, reliability, stability, physico-chemical properties and value for money represented by peat is difficult to match. However, even in growing media, the trend to replace peat where possible continues to grow - particularly in countries where indigenous peat is not available and/or where peat reduction policies are in place, such as the UK.

Unfortunately, there is very limited quantitative data on the production and use of SI and GM in the EU as this is not collected regularly or systematically. However, in 2008, a unique study commissioned by the European Peat and Growing Media Association (EPAGMA) was published by CO CONCEPT on 'The Socio-economic impact of the peat and growing media industry on horticulture in the EU'.

They found that European horticulture had a turnover of EUR60bn and employed 750,000 people. This was underpinned by the peat and growing media industry itself, which had a turnover of EUR1.3bn and directly employed 11,000 people in Europe.

Data from a comprehensive survey conducted in spring 2007 reported by CO CONCEPT indicated that annually, over 37 million m³ of growing media were produced in the 16 EU countries who provided data; over 22 million m³ of this was for the professional market and about 15 million m³ for the hobby sector. Peat was by far the main growing medium constituent, accounting for 86% of professional GM and 69% of GM for the hobby market, a total of about 29 million m³ in total.

Manufacturers have been very supportive of the work of CEN/TC 223 and generously contribute towards international validation trials of draft methods. Some of the major manufacturers in Europe adopted the first round of standards produced by CEN/TC 223 and have altered their contracts, product declarations, packaging, etc. accordingly, although this
is not universal and the organization of leading continental manufacturers (EPAGMA) is pressing for this to be mandatory.

The intention of sustainable waste management is to convert wastes into resources. When organic resources are intended for use as soil improvers and growing media it is essential that they are fit for purpose, which manufacturers will assess using the methods of CEN/TC 223.

2 BENEFITS EXPECTED FROM THE WORK OF THE CEN/TC

In support of the Scope and Objectives of the Committee, CEN/TC 223 published two Committee Reports (PD CR 13455 and PD CR 13456 covering Safety and Labelling etc. respectively) plus 18 fully validated standards for analytical procedures applicable (horizontally) to Soil Improvers and Growing Media between 1999 and 2011. During this time, and since, we have carried made revisions and amendments to these standards as identified during systematic reviews. Since 2011 we have not undertaken the development of new standards as there was no pressing need, resources are limited and the EC Fertiliser Working Group began consideration of proposals to develop a new Fertiliser Regulation which it was proposed to broadened to include other ‘fertilising materials’ such as lime, biostimulants, soil improvers and growing media.

Whilst the standards already developed were not Mandated, the growing media industry has been keen to have them universally implemented to eliminate trade barriers across the EU.

EPAGMA members and very many other producers have adopted these standards, as have producers in countries which have voluntarily adopted these standards as a basis for trade including the UK, France, Italy and Germany.

Whilst the work of CEN/TC 223 is not mandated, the standards are assisting with compliance in connection with certain EU directives, as follows:

1) most transactions in soil improvers and growing media refer to quantity, some being controlled by Council directive 211/76/EEC.

2) WI 00223004 ‘Quantity determination’ was established to produce a method that could be used for all of this type of product and that would enable the quantity declaration made comply with the issues regarding labelling stated in council Resolution 93/C 110/01 in the Annex and this has since been revised and published as EN 12580:2013.

3) The EU Regulatory Committee which prepared Council Regulation (EEC) No. 880/92 of 23 March 1992 on a Community Eco-label award scheme, agreed once CEN/TC 223 methods had been produced on soil improvers and growing media they should be adopted for the purpose of ecolabelling. This has now been put into effect by Commission Decision (EU) 2015/2099 of 18 November 2015.

4) For the purpose of defining End of Waste Criteria for biodegradable waste subject to biological treatment (compost & digestate), the JRC (2014) includes numerous CEN/TC 223 standards alongside draft Horizontal Methods – which themselves, in many cases, incorporate our methodology.
Regulatory obstacles:

Some Member Bodies have existing national standards and/or regulations on soil improvers and growing media covering labelling and specifications and (vertical) methods on specific products. Soil improvers are covered in some countries by fertilizer regulations and this further complicates the situation. However there has been a strong desire to establish a set of horizontal methods of test for determining the values of the characteristics in soil improvers and growing media. TC 223 have so far reached consensus on what standards to deliver to the market place i.e. validated horizontal methods of test, and has agreed that regulatory issues such as labelling and specifications should be dealt with by the EU and not by CEN.

CEN/TC223 standards are voluntary and have not been adopted across the EU; and furthermore, Mutual Recognition has not been fully accepted and has failed to facilitate trade as intended. Therefore, the adoption of CEN/TC223 standards EU-wide is now dependent on the development a new Fertiliser Regulation incorporating soil improvers and growing media - based on the standards it has developed. This is strongly supported by the industry.

The key factors in influencing the amount and type of products supplied to users in the soil improver and growing media market are considered to be price, performance, quality, consistency of quality and environmental concerns. The establishment of a new regulation and use of Europe-wide standards should help manufacturers to address all these factors.

Standards will assist industry by not having to meet different criteria in different states within the CEN community. It will assist smaller companies in particular that do not have the resource to develop validated methods and to know what criteria to meet. Information on safety will assist workers in the industry. In an industry where there is a range of products there is a need for horizontal methods of test wherever possible in order to reduce laboratory costs and to rationalise available methods.

Consumers would benefit by fair trading and having products fit for the intended purpose. The Standards and criteria set out in a new Fertiliser Regulation will assist public administrations such as trading standards bodies (legal metrology) and regulators in measuring compliance to product claims. The improvement in plants and crops grown with the products would benefit citizens in general.

3 PARTICIPATION IN THE CEN/TC 223

All the CEN national members are entitled to nominate delegates to CEN Technical Committees and experts to Working Groups, ensuring a balance of all interested parties. Participation as observers of recognized European or international organizations is also possible under certain conditions. To participate in the activities of this CEN/TC, please contact the national standards organization in your country.
4 OBJECTIVES OF THE CEN/TC 223 AND STRATEGIES FOR THEIR ACHIEVEMENT

4.1 Defined objectives of the CEN/TC 223

The current objectives of CEN/TC 223 are as follows:

- Revision and amendment to existing Standards published since 1999, as identified during their systematic reviews

- Participation by the Chairman as an observer in EC Fertiliser Working Group (and sub-group) meetings to represent CEN and CEN/TC 223 and to promote the application of standards developed by our expert TC.

- Development of new standards Mandated and funded by the EC in support of the new Fertiliser Regulation - as directed by CEN

- Liaison with CEN/TC 260 in respect of matters arising from the Fertiliser Regulation development – as in the case of work on organic fertilisers which we agreed was best handled by them.

- Liaison with CEN/TC 444 in respect of matters arising from the Fertiliser Regulation development; in particular in respect of standards for treated biowaste as their scope for these materials overlaps with ours.

- Participation in the CEN SABE meetings if and when matters arise.

4.2 Identified strategies to achieve the CEN/TC 223’s defined objectives.

Prioritisation of projects:

At the present time, priority will be given to the development of harmonised standards Mandated by the EC in support of the revised Fertiliser Regulation, a draft of which proposal is said to be published at the end of March 2016. It is expected that existing Standards will, for the most part, form the basis of these harmonised standards and will need to be maintained until such time as they are superseded.

Until this work has been completed, no other new work items can be accepted. Once completed, projects will be prioritized in the normal fashion by a ballot of members, with due regard to those which can build on existing national or international standards and which have the greatest benefit to industry, consumers and regulators.

CEN/TC 444

CEN/TC 223 has opted not to join the group of TCs involved in CEN/TC 444 as its objectives are principally environmental and tangential to our support for trade and the new Fertiliser Regulation. We think that it will involve more meetings (not fewer) and greater cost and will put a strain on our very limited resources. Our Secretary is a member of CEN/TC 444 and will act as a Liaison Officer between and on behalf of both committees.

Nevertheless, members of CEN/TC 223 have been encouraged to nominate experts to participate in CEN/TC 260 and /TC 444. In some cases, it may be possible for CEN/TC 223 to make direct use of the CEN/TC 444 Standards. In other cases, its Standards may serve as a starting point, but it must be emphasized that CEN/TC 223 may still need its own Standards, which make normative reference to the appropriate Standards produced by other TCs, but develop the methods and requirements for particular application to soil improvers and growing media. However, it should also be noted that there may also be circumstances
in which Standards developed by other TCs are wholly inappropriate for this specific application.

4.3 Environmental Aspects

The principal environmental issue addressed by this TC relates to the use of peat and its replacement by alternative materials such as by-products and recovered organic materials in the products under test. From the outset this TC has adopted a horizontal approach to ensure that methods of test are applicable to and have been validated against a wide range of matrices. These have included mixes containing peat, bark, coir, sewage sludge and composted biowastes etc. Such methods not only support existing industry practice but also facilitate the utilisation of potentially more environmentally friendly materials and support the circular economy.

In respect of the test methods themselves the TC has always been mindful of the potential hazards to operatives and the environment from the chemicals used in analysis. However, the quantities involved are small and they are monitored and contained.

Whilst conscious of the need to minimise environmental harm from the methods developed we must ensure that the steps taken are not disproportionate to the risk. We also need to be aware that changes to existing methods can have unintended financial or legal consequences, such as necessitating method re-validation and, for empirical methods, the potential requirement for a change in a regulatory or control limit.

Nevertheless, whenever a current method is being reviewed or when NWIPs are tabled we shall make a risk-based assessment of environmental harm to determine if there is a strong case for alternative reagents or procedures to be considered. Furthermore, we shall include a standing item on the agendas of WGs and Plenary sessions to facilitate the raising these issues.

5 FACTORS AFFECTING COMPLETION AND IMPLEMENTATION OF THE CEN/TC 223 WORK PROGRAMME

There are a number of factors which might impact upon the completion of the CEN/TC 223 work programme, as follows:

In recent years, bearing in mind the already large number of standards developed by CEN/TC 223 and against a background of the potential development of an EC (Fertiliser) Regulation to include (for the first time) both soil improvers and growing media requiring harmonised Standards, our work programme has been essentially concerned with standards maintenance and monitoring relevant activity outside our TC.

There has been a degree of standards-fatigue amongst members and participation has become patchy. Furthermore, BSI withdrew its provision of a Secretariat some years ago and, in the absence of offers of a permanent Secretariat from one of the member bodies, we have been reliant on the voluntary services of Austrian Standards (who support the Austrian convenor of our WG4) to provide secretarial support on an ad hoc basis – without which we could not have continued. This is very much appreciated.

The growing media industry has invested heavily in time and resources to foster the development of standards to facilitate trade since the 1980’s and a great deal of success had been achieved. However, there is a lessening interest in new WIs that are peripheral to mainstream activities and, with fewer staff and a keen eye on costs, a reluctance to support them - even if they are worthy. It is also increasingly difficult to find expert volunteers to
undertake desk tasks and to get feedback on the volume of CEN documents that are circulated.

Development of harmonised standards in support of the new Regulation can only be achieved if mandated by the EC and fully funded.