

BUSINESS PLAN

CEN/TC 346 CONSERVATION OF CULTURAL HERITAGE

EXECUTIVE SUMMARY

A scientific approach is essential for the conservation of the cultural heritage, as a preliminary basis that will ensure effective planning of ordinary and extraordinary maintenance works, as well as to assure their efficacy and durability.

A specific European standardisation activity in the field of conservation of cultural heritage is essential to acquire a common unified scientific approach to the problems relevant to the preservation and conservation of the cultural property.

The main objective of CEN/TC 346 is drafting European standards which will help conservation professionals in their conservation and restoration work. It will also ensure that European experts can exchange information on test and analysis methods for the conservation of cultural heritage. This standardisation activity will harmonise and unify methodologies in the European area.

Standards will be established on a need-based approach, in the fields of the processes, practices, methodologies and documentation of conservation of tangible cultural heritage to support its preservation, protection, and maintenance and to enhance its significance. This includes standardisation on the characterisation of deterioration processes and environmental conditions for cultural heritage, and the products and technologies used for the planning and execution of its conservation, restoration, repair and maintenance.

This standardization is addressed to all parties concerned with the individual subjects covered by the standards including owners, stakeholders and users of cultural heritage (monuments, museums, archives, libraries and collections) as well as peer groups such as architects, custodians, archaeologists, engineers, planners, conservators-restorers, craftsmen, conservation scientists, energy advisers, national authorities, transport and insurance companies, etc.

CEN/TC 346 is open to liaisons with any other European and International cultural and professional organisations dedicated to the conservation of cultural heritage that may provide a positive contribution to standardization activity.

1 BUSINESS ENVIRONMENT OF THE CEN/TC

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 and practices related to the scope of this CEN/TC. This business environment may significantly influence the standards which are developed and the content of the resulting standards.

It is important to begin by underlining the decisions taken by the European Council relevant to the development of cultural programmes and to the conservation and safeguarding of cultural property, encouraging the co-operation at European and International level:

- "The Community cultural programmes aim to encourage co-operation between Member States and third countries for the improvement of the knowledge and dissemination of European culture and history, as well as in the conservation and safeguarding of cultural heritage and artistic and literary creation" (Document Reference: COM (98) 239; Document Date: 1998-04-27)
- "The Treaty on European Union introduced a specific legal base for culture bringing cultural activities into the field of Community activities and policies. Article 128, paragraph 4 states that "the Community shall take cultural aspects into account in its action under other provisions of this Treaty". The present document contains the first report on the consideration of cultural aspects in Community actions under this Article 128, paragraph 4" (Document Reference: COM(96) 160; Document Date: 1996-04-17)
- "Article 128 of the Treaty identifies Cultural Heritage as a priority field of action (includes both movable and fixed heritage) through conservation and safeguarding of Cultural Heritage of European significance taking Cultural Heritage into account in regional development and job creation; tourism and environment; research" (Community Action Plan in the Field of Cultural Heritage - Council Decision O.J. 94/C 235/01)

There are also the Recommendations contained in the STOA (Scientific and Technological Options Assessment) Report "*Technological requirements for solutions in the conservation and protection of historic monuments and archaeological remains*", which was prepared for the European Parliament, Directorate-General for Research, October 2001. Section 4 recommends the urgent need for a "*European Panel on the application of science to Cultural Heritage*", to provide vision, guidance and guidelines for 'best practice' at a European level, such as scientifically-based protocols for validating conservation work on monuments and archaeological remains".

Between 1986 and 2007 the European Commission spent more than 120 million Euros to improve the scientific knowledge in conservation of Cultural Heritage and at the end of 2006 a new cultural heritage research programme was launched within the 7th Framework Programme. The number of European Universities, Research and Governmental Institutions contributing basic and innovative research has increased exponentially in these two decades.

With the aim of reinforcing knowledge and decision processes regarding cultural heritage, research programmes that improve intervention methods have been funded in many European countries. When relevant, it is important that this information is used as a contribution for the preparation of European standards.

1.2 Quantitative Indicators of the Business Environment

The market relevant to the conservation of cultural heritage is considerable and it involves a great number of small and medium enterprises, such as conservation-restoration companies, installation companies (e.g. lighting installation, conditioning and heating systems, air quality control), packaging and transportation companies, those companies that produce technological instruments, measurement devices and control and analysis equipment, test laboratories, producers and manufacturers of various materials (e.g. paints, stones, plastics, glass, paper, mortars, cement, wood composites,) archaeological excavation companies and institutions etc, and all those who have responsibility for heritage buildings and objects.

The conservation of cultural heritage is also very important in many places as a major source of income through visitors, both from the locality and tourists from further afield. The amount of foreign/local visitors is frequently seen as an argument to promote the protection and of heritage resources and favour its preservation. The quality of life within an historical environment, cultural enhancement, and the strengthening of common identity and shared roots act also as a motor for economic development and employment opportunities.

Distributors are usually small private companies with 10-15 employees (few have more than 100 employees), and standardisation on the conservation of cultural heritage, giving specific requirements for products and methodologies, will enhance the protection of the cultural heritage.

The need to identify environmental parameters and assess material-environment interactions are also extremely important considerations to be taken into account for displays in museums, galleries, buildings, monuments, libraries and archives, as well as in temporary exhibit galleries, in stores and in transporting moveable heritage objects.

Safety is another element to be taken seriously, because incorrect estimation of the durability of a product can lead to the decay of some of the components, which in turn may lead to a fragile and possibly dangerous structure.

2 BENEFITS EXPECTED FROM THE WORK OF THE CEN/TC

A specific European standardisation activity in the field of conservation of cultural heritage is essential to acquire a common unified scientific approach to the problems relevant to the preservation/conservation of the cultural heritage itself. Moreover, this common approach and the use of standardised methodologies and procedures would promote the exchange of information, would avoid the risk of duplication and foster synergy between the European experts and specialists involved in the preservation activity.

It should be underlined that the objects (subjects) of conservation works and care are unique by nature and definition and rarely susceptible to be standardised for themselves. This is why conservation work will benefit from standardised approaches respecting materiality, significance and values, bringing together all professionals involved in shared and visible methodologies and practices. These standards could be considered as the potential links between the materials and artefacts inherited from past (and their creators or transformers, the ideas and histories they convey) and the present public benefit, the pleasure, understanding and education of visitors and new generations.

Standardisation in the field of conservation of cultural property will:

- facilitate the exchanges between interested parties in Europe, respecting cultural identities, through the use of a common vocabulary;
- improve the efficiency and pertinence of the diagnosis with a subsequent better management of funding for the conservation/restoration works and therefore increasing the number of conservation projects and spin-off economic benefits/opportunities for new investment, and consequent job creation;
- give precise and appropriate indication on the kind of diagnosis studies to be performed, promoting in this way conservation works on an increasing number of artefacts;
- help to develop and improve products, materials, equipment and technologies to be specifically used for the conservation of cultural property;
- increase longevity and reduce maintenance costs of conservation works, therefore reducing costs in the long-term because conservation operations will be needed less frequently over time;
- improve safety and life of objects and collections, especially in case of temporary exhibitions;
- facilitate professional mobility and international trade and increase employment opportunities especially for young conservators, restorers, technicians etc...
- facilitate and identify needs and opportunities for Continuous Professional Development for all professionals and stakeholders;
- improve and increase the knowledge on materiality of cultural heritage and its consideration by all the stakeholders.

The development of standardized, procedures, test and analysis methods will provide the cultural institutions, businesses and laboratories with correct and comparable 'tools' for carrying out their work, whilst at the same time improving their proficiency/competencies.

Standardisation in the field of conservation of cultural heritage can also support the determination of specific technical requirements that may influence the production and improvement of equipment, products and devices. For example:

- a) methodology, protocols, guidelines to allow implementation of better practices or define equipment for preservation and conservation;
- b) Scientific equipment for laboratory and in situ chemical, geological, physical, mechanical and biological tests, measurements and analysis. In particular, this type of equipment is useful for non-destructive analyses, and to produce standard reference materials whose compositions match those of cultural material (i.e. ancient alloys compositions) as well as providing reference data of compounds found in degraded materials for analysis purposes;
- c) Products used in the different phases of the conservation work/treatment, such as cleaning agents, biocides, sealing materials, mortars for restoration, surface protective materials,

water-repellent materials, environmental friendly varnishes and adhesives, packing materials, lighting equipment, etc;

- d) Equipments and technologies used during conservation-restoration work (e.g. nebulizers/vaporisers, micro and macro-air abrasive machines, laser equipment) that are safe to use, respect the aims of conservation, preserve objects, significance and materials, and have a low environmental impact.

3 PARTICIPATION IN THE CEN/TC

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 AND STRATEGIES FOR THEIR ACHIEVEMENT

4.1 Defined objectives of the CEN/TC

4.1.1 General objectives

The main objective of CEN/TC 346 is to develop, on a need-based approach, specific normative documents in the field of conservation of cultural heritage.

These normative documents may concern:

- a) Movable and immovable cultural heritage

In accordance with UNESCO's Recommendation Concerning the preservation of Cultural Property Endangered by Public or Private Works, 15th October .20th November, 1968, Paris, and Convention Concerning the protection of the world Cultural and Natural Heritage, November 1972):

- Movable cultural heritage includes fine and decorative art, ethnographic objects, scientific and technological instruments, musical instruments, etc. , archaeological artefacts in or recovered from immovable property or concealed in the earth or underwater,
 - Immovable heritage includes buildings, sites, structures or other features of historic, archaeological or architectural value;
- b) All materials constituting tangible cultural heritage;
 - c) All aspects of the environment of tangible cultural heritage that could impact its conservation;
 - d) All aspects or stages of the conservation process, such as terminology, examination, documentation accompanying the conservation operations, diagnosis, investigations, conservation work, monitoring, etc.

4.1.2 Objectives 2015-2018

The CEN/TC 346 objectives for the 3-year period 2015-2018 will be:

a) To finalise the publication of the following standards:

WI	Reference	Subject
00346018	FprEN 16648	Conservation of cultural heritage - Transport methods
00346024	FprEN 16752	Conservation of Cultural Heritage - Glossary of technical terms concerning mortars for masonry, renders and plasters used in cultural heritage
00346028	prEN 16790	Conservation of cultural heritage - Integrated pest management (IPM) for protection of cultural heritage
00346029		Conservation of cultural heritage - New sites and buildings intended for the storage and use of collections
00346033		Conservation of Cultural Heritage - Guidelines for improving energy performance of historically, architecturally or culturally valuable buildings
00346034	prEN 16682	Conservation of Cultural Heritage - Guide to the measurements of moisture content in materials constituting movable and immovable cultural heritage
00346038	prEN 16873	Conservation of cultural property - Guidelines for management of waterlogged wood on terrestrial sites of archaeological significance
00348041	prEN 16853	Conservation of cultural heritage - Conservation process - Decision making, planning and implementation
00346042	prEN 16782	Conservation of cultural heritage - Cleaning of porous inorganic materials - Laser cleaning techniques for cultural heritage

To develop the following work items:

WI	Reference	Subject
00346003		Glossary of damage
00346025		Characterization of mortars found in cultural heritage
00346030	prEN 15759-2	Indoor climate – Part 2: Ventilation
00346031		Risk assessment methodology for movable cultural heritage

00346036	prEN15999-2	Guidelines for management of environmental conditions – Recommendation for showcases used for exhibition and preservation of cultural heritage – Part 2: Technical requirements
00346037		Waterlogged archaeological wood – Guidelines for characterisation
00346039		Conservation of cultural heritage - Historic Timber Structures - Guidelines for the On Site Assessment
00346040		Conservation of cultural heritage - Emergency and Contingency Plan
00346043		Cleaning of porous inorganic materials-Methodology for evaluation (in laboratory and in situ) of methods and materials used to clean porous inorganic materials
00346044		Conservation of Cultural Heritage-Artificial ageing for evaluation of treatments applied on porous inorganic materials: exposure to solar light, salt crystallization, freeze-thaw cycles, wet and dry conditions
		Surface protection for porous inorganic materials-Technical and chemical data sheets of water repellent product
		Methodology for the evaluation of cleaning methods . Procedure for analytical examination of the cultural heritage objects.
	EN 15898Rev.	Conservation of cultural heritage – Main general terms and definitions
		The Commissioning of Conservation work
		Protection of Collections on Display: Guidelines to ensure the safety of moveable cultural heritage while on exhibition

- b) To develop new documents on the basis of NWI proposals submitted in response to the review enquiry on the Business Plan. NWI will only be considered if they meet the conditions in 4.2.1 and 4.2.2.

Additional proposals for NWI will be considered by CEN/TC 346 during this 3-year period, only if they are urgent and duly justified.

4.1.3 Priorities for the future

The objectives for the next 3-year period (2018-2021) will be defined in 2018 on the basis of the assessment of the realisation of the 2015-2018 objectives and integrated into a revised version of the CEN/TC 346 Business Plan, completed by a revised work programme for this period.

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

4.2.1 Work programme – General principles

The work programme is established on a needs-based approach upon consideration by the CEN/TC 346 members of new work item proposals and their decision on:

- The relevance of the proposals to the work of CEN/TC 346, considering the problems or difficulties that are intended to be solved, the impacts and benefits of the standards and the urgency of their development.
- The availability of the necessary resources, i.e.: technical resources (the subject is sufficiently developed in Europe); human resources (specific experts are available) and funding (necessary funding to be invested by the interested parties).

- The appropriate Working Groups exist or can be created, in order that each standard is developed by the appropriate specialists.

Having reviewed the activity of CEN/TC 346 since its first meeting in 2004, a programme of work has been set up for a 3-year period (2015-2018) in order to cover the most urgent and important requirements of interested parties, taking into account the existing programme of work and available resources.

4.2.2 Work programme – New work item proposals

The proposers for new work items are the National Standards Bodies, existing Working Groups or other bodies authorized by the CEN rules.

Any proposal for a new work item shall give the necessary details to inform the interested parties and facilitate the decision by CEN national members (title, scope, aim of the work, expected deliverable: EN, CEN/TS or CEN/TR,etc.). Form N shall be used.

Proposers for new work items are also invited to provide any additional information, in accordance with decisions already included in CEN/TC 346 resolutions 43 and 96, that could be useful to justify their request, taking account of possible reference documents (existing National, European or International standards or other kinds of reference documents).

Particular attention will be paid to existing European standards or draft standards being prepared by other CEN/TCs or ISO/TCs. In these cases, the proposers are required to:

- a) State how the proposed work may relate to or impact on existing work, especially CEN deliverables;
- b) List relevant existing documents;
- c) Explain how the work differs from apparently similar work.

The criteria for assessment by agreement of NWIs in the field of conservation of cultural heritage are the following:

1. The standardisation objectives clearly demonstrate that:
 - a) there is a need for harmonization arising from current international activity in a field, indicating that working in a standard manner across nations will result in improved performance;;
 - b) The standard will have financial, technical and economic benefits on the conservation of cultural heritage;
 - c) Inappropriate practices currently exist which have a negative impact on conservation of cultural heritage.
2. In addition it can be shown that:
 - d) The proposed standards will cover 'horizontal' issues relevant for a range of contexts;

- e) Reference documents exist and can be used as a basis for new standards (e.g. existing national standards or other published guidelines) or international (e.g. ISO) standards can be referred to or developed in collaboration.
- f) At least five CEN members shall commit themselves to participate in the work and appoint experts, including when pre-adopting a NW;
- g) The work can be achieved within a reasonable timescale.

4.2.3 Maintenance of existing CEN/TC 346 standards

The status of all CEN/TC 346 standards adopted between 2009 and the date of approval of the revised Business Plan will be reviewed after 5 years, in accordance with the CEN rules.

The standards published before the revision of the Business Plan will be editorially updated regarding terminology (application of EN 15898:2011) and title (change of “cultural property” to “cultural heritage”) at their first revision.

4.2.4 Working structure

Referring to the 3-layer model for CEN technical structures and to Resolutions CEN/BT 41/2006 and 60/2007, CEN/TC 346 decided to re-organise its working structure, applying the following principles:

- a) Standards (or other types of deliverables: CEN/TS, CEN/TR and CWA) are prepared in Working Groups (WGs) created by the Technical Committee in accordance with the CEN rules;
- b) Each standard (or other type of deliverable: CEN/TS, CEN/TR and CWA) is prepared in a WG constituted of experts, nominated in accordance with the CEN rules, representing the interested parties specific to the scope of the standard;
- c) WGs are to be responsible for the development of more than one work item only when the same experts need to be involved.

In accordance with these principles, the working structure in five WGs established in 2004, is changed as follows to cover the objectives 2012-2015 described in this Business Plan (see 4.1.2 a), b) and c)):

- WG 1 General methodologies and terminology
- WG 2 Characterisation and analysis of porous inorganic materials constituting cultural heritage
- WG 3 Evaluation of methods and products for conservation works on porous inorganic materials constituting cultural heritage:
- SCOPE MODIFIED: drafting standards on the evaluation and choice/selection of the methods and/or products performance and operating/working conditions in relation to the conservation/restoration, repair, maintenance and preventive conservation work.
Drafting standards for monitoring the durability and the side effects of treatments in order to improve planned maintenance and future decision making.

- WG 4 Protection of collections
- WG 5 Packing and transport
- WG 6 Exhibition lighting of cultural heritage (JWG between TC 346 and TC 169) – (DISBANDED)
- WG 7 Specifications and measurement indoor/outdoor climate
- WG 8 Energy efficiency of historic buildings
- WG 9 Waterlogged wood
- WG 10 Historic timber structures
- WG 11 Conservation process

WG 12 Showcases

- WG 13 Investigation of architectural finishes – Procedure, methodology and documentation of results
(after the call for experts the working group will propose a detailed work programme)

4.2.5 Working methods in CEN/TC 346

4.2.5.1 TC voting procedures

In accordance with the CEN/CLC Internal Regulations Part 2 "a voting decision may be reached either by a show of hands at the meeting or outside a meeting by correspondence."

It is essential that decisions regarding the management of the technical committee and the approval of new work items result from a consensus of CEN/TC 346 members based on genuine consultation with interested stakeholders. To achieve this it will require that:

- a) Draft resolutions and accompanying documents for adoption are circulated by correspondence at least 2 months before the deadline;
- b) Documents to be considered as the basis for a resolution to pre-adopt or adopt a new work item proposal to be voted on at a TC meeting are circulated at least 4 weeks before the meeting;
- c) The absence of a reply is considered equivalent to abstention.

Even in the case of a positive voting result, the CEN/TC Secretariat should take the necessary steps to insure that any comments are considered in due time by the appropriate body.

4.2.5.2 Information on work progress

A document giving information on the development of WIs, the working structure and the names of working structures convenors and project leaders (if any) must be updated by the TC Secretariat at least twice a year (including prior to each TC meeting).

4.2.5.3 Use of languages at meetings

CEN/TC 346 recommends using English as working language at the TC and WG meetings.

NOTE If required, the other official CEN languages (French and German) can also be used, in accordance with the CEN Internal Regulations.

4.2.5.4 Use of electronic tools

CEN/TC 346 recommends using the internet in the management of both the technical committee and working groups, respecting the CEN rules in this matter, in order to reduce costs for all members involved in the activity of this technical committee.

4.2.6 Cooperation with other CEN/TCs

4.2.6.1 General principles

The scope and objectives of CEN/TC 346 are cross-disciplinary (see 4.1.1). The answer to be given to requirements specific to the conservation of cultural heritage may result in working on subjects already covered by the work of other CEN/TCs with different scopes and objectives. Duplication of work, overlap and conflicts shall be avoided. If necessary, the work of CEN/TC 346 may be undertaken in cooperation with another CEN/TC.

It is essential to identify as early as possible in the process of developing a standard in CEN/TC 346 the existence of related work in one or several other CEN/TCs (already adopted documents or documents being prepared, including ISO standards).

The question of overlap with other CEN/TCs shall therefore be raised:

- When proposing a NWI (see 4.2.2);
- When deciding to pre-adopt or adopt a NWI;
- When starting the work in a WG;
- At any time in the process if new information becomes available.

If after consideration of existing reference documents it appears that information has to be exchanged between CEN/TC 346 and another CEN/TC, a liaison may be established by TC resolutions and appointment of liaison officers.

In case of complex situations, a feasibility study may be required, before starting a new work.

4.2.6.2 Cooperation with CEN/TC 250 “Structural Eurocodes”

A co-operation should be established between CEN/TC 346 (work on assessment of structures of immovable cultural heritage) and CEN/TC 250 (work on assessment and retrofitting of existing structures).

4.2.7 Cooperation with European and International professional organisations

CEN/TC 346 is open to establish liaisons with any other European and International cultural and professional organisation dedicated to the conservation of cultural heritage that may provide a positive contribution to the standardization activity. These Organisations should submit a cooperation proposal to CEN who will evaluate and negotiate, or reject, the proposal.

The aim of co-operating with a wider range of organisations is to:

- seek contributions to the definition of CEN/TC 346 standardisation strategy and to the preparation of standards;
- disseminate information on CEN/TC 346 work programme and adopted deliverables.

Liaisons have already been established with the following organisations:

- European Confederation of Conservator-Restorers' Organisations (E.C.C.O.);
- International Council of Museums – Committee for Conservation (ICOM-CC);
- International Council on Monuments and Sites (ICOMOS);
- International Federation of Library Associations and Institutions (IFLA);
- International Institute for Conservation of Historic and Artistic Works (IIC);
- International Union of Architects (UIA).

4.3 Environmental aspects

4.3.1 Environment and cultural heritage

The programme of work of CEN/TC346 is unusual in that it is not specific to a product or system but provides tools to help in the protection of the cultural heritage for future generations. However, it is still necessary to understand how the methodologies, tests and guidance drafted by CEN/TC346 to protect the moveable and immovable heritage will interact with the environment. For example the impact of the maintenance of controlled conditions in a museum, the cleaning of building facades and chemical analysis of salts in porous materials all have potential environmental impacts that can be minimised by careful drafting of standards.

Examples of environmental aspects which need to be considered and minimised include

- emissions to air,
- discharges to water and soil,
- use of raw materials,
- energy and water consumption, and
- land use.

For each identified environmental aspect, there are environmental impacts. Environmental aspects are connected to impacts through a cause and effect relationship. Examples of environmental impacts that can be positively or negatively influenced by provisions in standards include

- a) Climate change (through the emission of greenhouse gases),
- b) Air pollution (through uncontrolled/untreated or accidental emissions of particulates and toxic gases to air), and
- c) Depletion of non-renewable resources (consumption of fossil fuels, minerals).

Standards need to consider these impacts whilst taking into account the needs of the heritage objects and buildings in order to insure their survival for future generations.

In response to the need to reduce emissions of greenhouse gases CEN/TC 346 notes that:

- Energy saving has always been a concern of heritage preservation and protection;
- Monuments and historic buildings often perform better than new buildings when considering the energy efficiency of a building over its entire life cycle (life cycle analysis);
- A comprehensive approach to energy conservation has to be developed including the special requirements for the preservation of valuable building stock;
- A "do nothing" option must remain possible if an energy improvement is not required or not possible);
- Interventions a monument or other heritage should comply in all aspects with sustainability requirements.

4.3.2 Assessing environmental impact of NWIPs

Each NWI proposal will be reviewed for direct impacts on the environment and also for benefits to the sustainability of the cultural heritage. Suggestions for minimising impacts and offsetting impacts whilst maximising benefits will be required for each proposal.

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

One of the major risks in the development of standardisation activity in the field of conservation of cultural heritage is the problem of finding funding and planning budgets to finance the activity of the relevant experts involved in the work. Most of the experts involved in the conservation field work for SMEs or small specialist departments in academic institutions / quasi-government agencies where securing funding for new projects is difficult and always needs to be agreed and budgeted well in advance. The fact that resources are limited across Europe makes it essential that there is prioritisation of WI and standards to insure the more important ones are completed.

Although at the European level there is a great interest in this kind of activity, there is often a lack of contact between the experts and the National Standards Bodies. In particular, in some cases there is no specific national active mirror committee or group which can deal with the work of standardisation on conservation of cultural heritage. It is important to consult as widely as possible through National Mirror Groups, who should discuss how to contact the relevant people; e.g. through their professional national bodies, register of experts.