



The report is produced by an independant consultant, Hans Jørgen Brodersen, hjbConsult, for the Danish Society for the Conservation of Nature. Views expressed in the report does not necessarily represent the views of DN.

Frontpage:

In order to improve animal wellfare and to improve/reduce environmental impact from livestock farming, best available technology standards for pigstys or -houses and for other domistic animals are produced under EU. The pictures show a traditional intensively farm with pigsty boxes and an open pigsty with loose animals.

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Reader's guide

The report presents a mixture of experiences and recommendations concerning participation in standardisation, and should be read as a contribution to the debate on transparency in political decision-making.

The Preface is a short comment on NGO participation in the standardisation process as experiencedby 'Danmarks Naturfredningsforening' (DN). It sets out DN's aims of taking part in this project.

The first chapter, Introduction, outlines the project's setting and objectives, elaborates on the purpose of this report and on the evaluation method.

The second chapter is an introduction to the standardisation process written by the Danish Standards Association. This has been included mostly for readers who are unfamiliar with international standardisation, but also to inform on the growing importance of environmental

aspects in standardisation.

The third chapter covers edited case studies in the areas of standardisation selected for the project. These are based on interviews with DN participants, on questionnaires to national and international standardisation experts, and on desk studies of agendas, memos and project material.

The fourth chapter presents comments on democracy, technocracy and standardisation in the project. It covers the general background issues of democracy, participation, and transparency concerning sustainability, as raised on the political agenda. In connection with the project, an international one-day conference was held. Comments and recommendations from the conference are included.

The fifth chapter sets out the conclusion and recommendations for future development.

Preface

Green wishes to standardisation
By Gunver Bennekou, Director of Danish
Society for Conservation of Nature
(Danmarks Naturfredningsforening).

Is technical standardisation solely an area of technical nitty-gritty, better left with industry experts to decide upon, or has it become an inescapable tool for making sustainable products? We thought the latter was the case, however, we lacked the experience, which tells how environmental NGOs can influence standardisation organisations to make 'sustainable standards'. To gain this experience, the Danish Society for the Conservation of Nature (DN) therefore initiated the project 'International Experts, Environment and Democracy'

After four years of active involvement in different technical groups we can clearly say, that our presence in standardisation makes a difference, but also that participation means setting aside a lot of resources, both money and manpower. Without the financial support from the Danish Environmental Protection Agency it would not have been possibly for DN to participate at this level in the work with standardisation.

Hence 'greening the Single Market' is not only a matter of a political game between EU and the Member States, but also a matter of cooperation and struggle between public authorities and private standardisation organisations.

DN had to find a way in a world of soft-law-makers, either by becoming a soft-lawmaker itself, or by finding instruments to ensure that soft-law makers respect environmental concerns in their work. On this background, DN undertook this project, investigating 'International Experts, Environment and Democracy'.

On this background, the overall aim of the project was to improve the possibilities for environmental NGOs to take part in greening the market infrastructure. This was done in a threefold way: I. by mapping the landscape of lawmakers and soft-lawmakers, and their complex interplay; 2. by testing strategies to find out how to participate; and 3. by continuously communicating the results to environmental activists and the wider public.

These three ways and our more or less success with this work in standardisation is described in this publication, which also include our recommendation to the future participation of NGO's.

This project wouldn't have been possibly without funding from the Danish Government. So we would like to thank the Council for cleaner products for giving us this opportunity

I Introduction

This paper reports on the evaluation of a fouryear pilot project of NGO participation in international standardisation: "International Experts, Environment and Democracy". The Danish Society for Conservation of Nature (Danmarks Naturfredningsforening, DN) carried out the project in the period between January 2000 and January 2004.

A one-day international conference on the project subject was held in October 2003. This occasion gave rise to supplementary information, comments and adjustments concerning the project experiences and results, which are contained in this report.

I.I 'International Experts, Environment and Democracy'.

The Danish Society for Conservation of Nature, DN, applied for funding in August 1999 to complete a project on "International Experts, Environment and Democracy" ("Internationale ekspertfora, miljø, og demokrati"). The project was approved in November 1999 under the Danish Environmental Protection Agency programme "Cleaner Products". The Danish EPA services the Danish Ministry of Environment.

Over the four-year project period, DN received a grant of about DKK 1.9 million (approximately 267,000) from the Cleaner Products programme. DN has also supported the project with its own funds, and by lending the office facilities at its headquarters in Copenhagen. DN supplied about DKK 380,000 (approximately 50,700) of its own money for secretarial support to complete the project. The grant covered personnel costs measured in terms of man-hours, preparation materials, postage, printing, national and inter-

national travelling and accommodation etc.

Danish Standards Association, DS¹ has been actively participating in the project as mediator and hired consultants.

A small advisory project steering group was established with representatives from Danish EPA (Authorities), DS (standardisation body), Roskilde University (academia), Deloitte & Touche (private sector), Danish Consumer Council (consumers' NGO), and DN. The group monitored the project process and gave advice, but was not active in implementing activities. The chairman of the committee, from Danish EPA, withdrew from the committee halfway through due to budget cuts at the EPA. The DS representative was appointed to the chairmanship for the rest of the project period.

I.2 Evaluation

Evaluation and reporting are conducted by an independent evaluator: Mr. Hans Jørgen Brodersen, M.Sc., Hjb-Consult, on an assignment commissioned by DN, from August 2003 to December 2003.

I.2.I Purpose and objectives of the report

The general purpose of the report is to contribute to the ongoing debate on democracy versus technocracy in sustainable development in a market-oriented, globalised world.

The intention is to highlight issues contributing to public participation in favour of sustainable development on product, system, management, measurement, and service standards. In line with this intention, the aim of the project

Danish Environmental Protection Agency: (WebPages: www.mst.dk)
Danish Ministry of the Environment: (WebPages: www.mim.dk.),
The Danish Society for Conservation of Nature (WebPages: www.dn.dk)
Danish Standards Association (WebPages: www.ds.dk)

and this report is the greening of standardisation, i.e. inclusion of environmental aspects in all standardisation as a means of spreading sustainable development.

In general, this paper does not purport to present a traditional evaluation of project performance and objectives, although it does report on the project outcome.

Firstly, the report aims to present current experiences of environmental NGOs' chances of monitoring and actively participating in standardisation processes as advocates of sustainable development and environmental preservation. The report is built on experiences, views and ongoing reflections gathered among DN participants and standardisation experts concerning the general project purpose and objectives. These are presented in the form of case studies and debating arguments.

The indicators and footprints of DN's efforts in the realm of standardisation will be presented wherever identified.

Secondly, the objective is to highlight and discuss the democratic process of setting standards for technological development in a globalised world, and the mechanisms through which democracy is exercised.

Against the background the evaluation's findings, the evaluator issues recommendations for further debate and possible action.

I.2.2 Evaluation method

The report is based on a few intensive interviews, questionnaires, and desk studies of documents, budgets, memos, minutes of meetings

and agendas related to the project and the standardisation committees.

The evaluation method chosen centres on the general success criteria of the project, on DN's own insights into the area of standardisation, DN's activity level, knowledge-building and information work, as well as on information channelled to a wider audience through the media and through DN's active participation in the public debate. It is difficult to examine, monitor or investigate the success of DN's efforts, such as the level of influence, number of achieved results or arguments put forward, aspects, issues and notes represented in the final standards. Nor can success measured against the chosen criteria always be ascribed to particular efforts, as the effects of each stakeholder's contributions cannot be easily disentangled. The principle of consensus among stakeholders in the standardisation process means that only rarely can any aspect of the final resulting standards be traced back to the proposals of particular stakeholders. A scoring system to measure active participation and results, based e.g. on comparisons between the situation prior to DN's entry and the final result, was neither prepared prior to the project nor could it have been included in the proj-

However, clear indicators of project results are measured during the evaluation. Wherever they are detected, opportunities and barriers to NGOs participation will be part of the arguments presented in the report.

The five key DN participants were interviewed. Based on a guide of critical questions on project objectives and self-evaluation, the evaluator assesses their active involvement and possible effects on the process.

These interviews are validated by means of

questionnaires to the committee chairmen, experts and secretaries of the Danish and international standardisation committees and organisations. Seven questionnaires were returned. The questionnaires aim to verify the relevance of work items and of the general contributions made by DN. Seven responses are relatively few, but they cover all the committees in which DN took part, and they provide elaborate information to substantiate the evaluation.

The representatives of the national standardisation body (NSB), 'Dansk Standard' (DS), were also interviewed. In this case, the purpose is to confirm the level at which DN was active in the process, and to verify the need and extent of co-operation between DN (NGO) and DS (NSB).

Selected available reports and articles on the issues have been brought into the evaluation where appropriate, and extracts of reports and comments from the one-day conference are included in the report. The evaluator is independent and has taken on the task of collecting the information and presenting the findings.

Based on the findings, the evaluator has been asked to set out the conclusions and future challenges.

1.3 Project outline

The project application formulates three pillars of concern:

- Sustainable development of society
- Globalisation
- Democratic development

The first pillar, sustainable development, is high on the agenda of the European Union and international arrangements such as the 5th and

6th Action Programmes of the EU, and the United Nations Agenda 21. The general goal of these programmes is to implement environmental and social policies in all government, civil-society and private sector strategies and action programmes. However, transforming sustainable development from agenda items into implementation is a long-term challenge. On a national level, various programmes have been launched to support the international agendas focusing on the greening of markets and products. For instance the "Cleaner Products Programme" in Denmark targets the central issue of innovating in favour of greener products.

The second pillar is the general globalisation, and especially of free trade. With free trade, environmental regulation of open markets is no longer the exclusive domain of national parliamentary control systems, but calls for international agreements. International regulation should include and strengthen the protection of the general public and the environment, setting health and safety rules for products and services. However, there is a tendency for regulation to focus mainly on the liberalisation of markets, and there is a concern that environmental issues feature less prominently.

On the international scene, multiple actors from the private and public sector, national and international sphere, have joined in the battle for influence and market control. The actors are found among political organisations such as the WTO, UN², national governments, the European Commission, but also among private businesses and industry organisations like Cembureau, WPO, CEFIC etc.³. But while an increasing number of interested parties join in the harmonisation process, the decision-making process of international environmental regulations and standards has moved into less

² WTO: World Trade Organisation, UN: United Nations

³ Business and Industry Organisations: Cembureau: The European Cement Organisation, WPO: World Packaging Organisation, CEFIC: European Chemical Industry Council.

open forums of experts and technocrats. International political committees and working groups under the EU produce the legal frameworks of the European single market, and negotiate technical agreements during the WTO rounds to set the rules of global trade. International standardisation bodies like ISO, CEN, CENELEC⁴, and national standardisation bodies have been tasked with preparing internationally harmonised standards and technical documents.

The third pillar is a concern for the democratic process. When decisions are taken away from the general public's ability to monitor and participate in the making of legal set-ups, fears of a democratic deficit arise. For both governmental policy agents and groups of citizens, the international process is less transparent, as the number of participants is greater, more aspects are likely to be introduced, and the various actors' interests and views are less easy to learn and become familiar with. It may thus become difficult to form an idea of the political and technical arguments, while citizens' control is difficult to exercise.

The distribution of representation in international forums also causes a problem of democracy. Businesses and technical experts tend to be more strongly represented in standardisation forums than environmental stakeholders. This situation give rise to a fear that environmental issues feature less prominently in the process than business and market interests.

On the other hand, stronger environmental representation in the process increases the scope for influencing and spurring sustainable development. Integration of environmental aspects into the standards will strengthen the effect of sustainable regulation in industry. DN wishes to pursue this opportunity to demo-

cratically influence environmental development by participating in the standardisation process.

The project's objective is to investigate how DN, as an environmental NGO, may strengthen the pro-environment political dimension and the pro-environment potential of the standardisation process. This applies particularly to integrated product policy and greening of standards.

The objective is to produce insights into the decision-making process, to open up the process, making it more transparent and democratic. For this purpose, the project must examine which strategy and methods DN should apply in pursuit of maximum influence.

The strategy was divided into four elements:

- The strategy of criticism: DN is a critical observer, and attempts to focus on political and public awareness of potentials and problems in technically-oriented decisionmaking processes
- The lobbying strategy: DN's participation is aimed at promoting or tightening up a general legislative framework for the organisational set-up of the work within technical expert committees. The lobbying strategy is primarily aimed at influencing the elaboration of EU directives and standardisation mandates.
- The strategy of self-management: DN's participation is aimed at influencing and strengthening the work within technical committees and working groups with a view to ensuring systematic attention to environmental concern from within these organisational set-ups themselves.
- The point-by-point strategy, DN participates under the existing conditions to promote the integration of environmental concerns into the elaboration of specific stan-

⁴ ISO: International Standardisation Organisation, CEN: European Standardisation Organisation, CENELEC: European Standardisation Organisation for Electrotechnical Standards

dards. The effect is concentrated on specific issues, and is aimed at building a network of internal and external experts capable of participating in the work.

(Article: Free Trade Standards and Environmental Protection /translation of excerpt from the application).

For each of these strategies, specific areas were chosen and corresponding work groups were formed, drawing up a set of principles for the selection process

- DN should be able to find competent participants among its staff members.
- The selected work groups or committees, as well as the issues that they address, should be highly relevant on a long-term hasis.
- The work items should be of public interest, and it must be possible to communicate their relevance and results.
- Preferably, there should be Danish alliance partners for the international process.

Moreover, a central aim of the project includes communication both within the DN organisation and towards other interested parties.

I.3.I DN in other international work.

In addition to the DN project on "International Experts, Environment and Democracy", DN has been an active participant in international activities for several years. This serves to underline that globalisation and internationalisation has become a central issue for NGOs such as DN. As an indicator of this work a few of the international activities are mentioned below.

During 2001 and 2002, DN conducted a programme concerning European and internation-

al political activities focusing on nature and environment. In the programme evaluation ("Evaluering af DNs arbejde med Europæisk og International Natur- og Miljøpolitik", by Tholstrup Consult, October 2002) the evaluator estimates that "DN in co-operation with the European Environmental Bureau (EEB) ensured that nature and environment became key issues on the European and international political agendas as well as in the preparation of European and international legislation". This assessment is "based on DN's public and internal exposition of its activities, its ability to draw attention, initiate debate, increase knowledge, influence attitudes, and finally to achieve the ultimate effect: "policy fingerprints". Both a majority of DN members and the DN council endorse this activity, and politicians "find that DN's European and international political activities are of great strategic importance, just as DNs local and national activities are of great strategic importance."

DN also carried out an international project in preparation for the 2002 Johannesburg Summit. The project was based on the creation of NGO networking between Eastern Europe and South Africa. One objective was to make a substantial contribution and present shared views on the "reform of Europe's Common Agricultural Policy and the need for a new Global Deal".

DN has been an active member of the European Environmental Bureau (EEB) for several years. (The former DN Director was, for instance, elected as Secretary General of EEB for a period until 2001.) DN is now an executive committee member of EEB. Through EEB, DN has been actively supporting international political statements, collecting information and working on the international political scene as lobbyists, targeting the European Union in par-

ticular.

Moreover, DN is often invited to join in as NGO participant in official Danish delegations to international summits and meetings on sustainability issues. DN has been able to accept this invitation, and its participation has generally been well received. DN's engagement is often noted to bring in qualified inputs and arguments.

DN has been involved in other international work and projects throughout the last decade. International communication and consultations have increased over this period. This trend is not expected to diminish, but rather to grow,

as policies and pollution cross the fading national borders, and sustainable development becomes global in scope and solutions.

Consequently, DN has gained much valuable experience of working across borders, and of taking action concerning international decisions in the field of nature and environment. This experience is an asset for the DN organisation, as conservation of nature is a common global challenge, which cannot be solved nationally or even regionally.

Box I: Growing International influence by NGOs in the UN system:

The UN has recognised the growing importance of NGOs in international work.

- Lately, the UN has, for instance, increased the number of NGOs with consultative status under ECOSOC (UN Economic and Social Council).
- The UN has set up an 'Informal Regional Network' (UN-NGO-INRENE) with the
 purpose of strengthening the partnership between the UN and NGOs. INRENE
 disseminates information. The aim is to improve and "achieve a just, balanced, effective and genuine involvement from all regions and areas of the world".
- The UN has, for instance, specifically asked NGOs to present examples of success stories in relation to the UN Millennium Development Goals in order to inspire others.
- The UN Global Compact urge NGOs to take an active part in the solutions.
- At UN summits and meetings NGO's from 'Major Groups' are given consultative rigths.

2 Standards and Environment

The chapter is written by Danish Standards Association, Head of Environment Section, Jesper Jerlang and edited by the evluator.

2.1 The importance of standards

Standards constitute an important part of the technical infrastructure in today's society. Standards are widely used to ensure harmonisation, coherence and conformity for products as well as to ensure an adequate level of performance, safety and protection of health and environment.

During the last decades, globalisation has lead to a major rise in international standardisation. With the fast growth of the international markets, the focus has shifted from national to international standardisation. And within Europe, the EU and the European Single Market have laid the foundation for intense European standardisation to ensure harmonisation. More than 18,000 international standards and more than 13,500 European standards have already been developed, and every year approximately 2,500 new standards are published. Today, standards exist for almost all kinds of products.

Hence, standards have a significant influence on the design and performance of products, including their environmental impact.

2.2 Standardisation set-up

The development of European standards is performed by the three European standardisation organisations: ETSI (for telecommunication standards), CENELEC (for electro-technical standards) and CEN for other standards. Correspondingly, the international organisa-

tions ITU, IEC and ISO are responsible for the development of global standards. As telecommunication standards are of less relevance to the environment, they have been left out in this paper:

CEN, CENELEC, ISO and IEC are membership organisations made up of national standardisation bodies (NSBs). Danish Standards Association (DS) is Denmark's member of these four organisations. This means that all participation in European and international standardisation bodies is channelled through DS.

The European and international organisations all consist of a central secretariat and a number of technical committees (TCs), each of which is responsible for the development of standards within a defined area and mandate. Management is performed by a technical board, an administrative board, and a general meeting attended by all members (NSBs). The TCs set up a number of subcommittees (SCs) and working groups (WGs). It is within the WGs that the actual work takes place. In 2003, there were 738 TCs/SCs and 2.175 WGs in ISO, 174 TCs/SCs and 926 WGs in IEC, 276 TCs and 1,400 WGs in CEN, 70 TCs and 268 WGs in CENELEC, and 233 mirror committees within DS.

Standards are developed through a structured process. The TC decides whether to take on a new work item, and then delegates responsibility to a WG. The WG develops a proposal, which is approved by the TC and sent for public inquiry for 4-6 months. Hereafter, the WG finalises the standard, and the TC submits it to

a vote among the participant NSBs. If the standard is approved, it will be published as a European or international standard. National organisations are obliged to adopt the European standards at home, whereas this is voluntary for the international standards.

The European and international organisations have co-operation agreements, and many standards are jointly developed and submitted to a parallel enquiry and vote in ISO and CEN, or IEC and CENELEC, respectively. 20% of CEN standards are developed within ISO, whereas 80% of CENELEC standards are developed within IEC.

2.3 The New Approach

Standards are, in principle, voluntary. However, many standards are connected to legislation in various ways. Some EU directives and some national legislation prescribe the use of certain international, European or national standards, e.g. for the measurement of air quality or construction principles.

At the European level, the implementation of the European Single Market is partly based on standards as a tool of harmonisation. In 1985. the EU launched the so-called New Approach to facilitate the development of legislation necessary for harmonisation and for the European Single Market. The principle of the New Approach is a division between political and technical matters. The political issues and requirements are dealt with in the directives and described in the so-called essential requirements, which are the overall demands for safety, health and environmental protection. The more detailed technical descriptions are left to the standards. The EU gives a mandate to the appropriate European standardisation organisation, which then develops the necessary number of standards. The Commission appoints an external consultant to ensure that the standards meet the requirements set out in the mandate. If the standards are approved, they become harmonised standards (lists are published in the Official Journal).

Harmonised standards are still voluntary, but conformity with the standards provides presumption of conformity with the directive. Moreover, in practice, the standards are often largely the only way to assess such conformity. Conformity assessment is performed according to the level of safety required, from self-declaration to accredited third-party certification.

In 2003, 21 New Approach directives were issued (e.g. the safety of machines directive, the low voltage directive, the toys directive and the packaging directive) and 2.165 harmonised standards were published.

2.4 Participants

Participation in the standardisation process takes place through national standardisation bodies (NSBs). The NSBs organise a number of national committees, which act as mirror committees to the European and international committees. For example, a Danish committee for electric cables follows the TCs' work on electric cables within the IEC and CENELEC. The national committees appoint their national delegations to the TC meetings, and appoint members to the WGs. The national committees decide the national comments and votes on proposals for European and international standards (they may also develop national standards, but this is only done to a very limited degree at present). The NSBs host the secretariats of national committees, and normally also of TCs, whereas the chairmen (and WG members) are external participants.

The participants carry out the standardisation process. Normally, participation is unpaid, but some sectors and organisations benefit from programmes to cover travelling costs. Most NSBs operate with member fees for participation as a contribution towards financing their services. Other financial inputs can be government grants, sale of standards, and income from certification, consulting or other activities.

Participants in standardisation can be divided into four categories:

- I. Industry: enterprises and industrial organisations. Industry and enterprises are the users of standards, and thus have great interest in their adequacy (i.e. depending on their respective products and technical capacity, some want standards at a low level and others at a high level). Industry experts are mostly technical experts from the development and/or production departments.
- 2. Authorities: both national, regional and EU authorities participate in the standardisation process in order to ensure that their legislative and political requirements are addressed or harmonise with the standards. In general, the EU authorities do not participate in the standardisation process directly, but through the mandates described in the section on the New Approach. The EU's overall aim is harmonisation and conformity with its directives, whereas national authorities often pursue national political interests.
- 3. R&D institutions: experts from universities, R&D institutions and consultants participate to add technical expertise to the standards, as well as to maintain and develop their own expertise. Experts from R&D institutions are sometimes paid to participate, if their input is regarded as important.

While all these four types of stakeholder participate at the national level (albeit not to the same degree in all countries), industry is more dominant at the European and international level. The vast number of TCs and WGs means that stakeholders have to prioritise their participation, especially NGOs, whose limited resources only allow them to participate in a small part of the activities.

In 2002, 59% of participants in DS came from industry, 13% from the authorities, 20% from Research & Development institutions, and 8% from NGOs. Here, the term NGO also covers industry-related organisations. With a more narrow definition, only 4-5% of the participants are from NGOs, mainly from consumer organisations and trade unions!

2.5 Integration of environmental aspects

When looking at the integration of environmental aspects into standardisation, it must be stressed that a major part of the standards do not affect the environment in any way. This includes e.g. terminology standards, many system standards and most measurement and

^{4.} NGOs: consumer organisations, trade unions and to some degree environmental organisations, participate in pursuit of their specific interests. Consumer organisations and trade unions represent the groups affected by the standards. Environmental organisations participate to limit the negative environmental impact of standards. The European Commission provides funding for European organisations participating in European standardisation: ANEC represents consumers, TUTB the trade unions, and ECOS the environmental organisations (and NORMAPME the small and medium-sized enterprises).

Internal data from DS.

test standards. However, especially the category of product standards contains provisions for design and/or materials with an impact on the environment.

Integration of environmental aspects into standardisation has taken place for many years, but only to a limited extent and not systematically. In 1996, ISO and IEC launched guides for the inclusion of environmental aspects in standardisation work (ISO Guide 64 and IEC Guide 109). Both guides provide a general introduction to the concept of integration of environmental aspects.

In Europe, the pressure for taking environmental considerations into account increased during the 1990s due to the links to European legislation. The actors included NGOs, national authorities and the European Commission. As a result, in 1999, CEN set up environmental guidelines for the standardisation process, including a voluntary matrix for environmental screening of standards. Furthermore, CEN established an environmental help-desk (EHD). The concept of the EHD was that two employees assisted by a network of environmental experts should help the CENTCs and WGs to consider environmental aspects. In practice, the EHD has been run by only one employee most of the time due to financial constraints. The contribution from EHD has mainly consisted of various comments to TCs and WGs on how to include environmental considerations in specific proposals for standards. However, many of these comments have been of a general nature, and there is no statistics as to which degree they have been taken into account.

No kind of statistics on inclusion of environmental aspects into standards exists for any of the standardisation organisations. CENELEC has tried to establish a database on environmental aspects in electro-technical standards, but the database has not yet been developed to a useable stage.

Integration of environmental aspects has taken place in various ways: by removing provisions against the use of recycled materials (e.g. for containers), by reducing the allowed emissions into the air from gas heaters and fire stoves, by opening for the use of water-based paint, by reducing the requirement for the content of cement in concrete standards etc. In the CEN/TC for toys, 200 chemical substances are currently being evaluated. And in the energy sector, the standards for labelling of energy consumption (e.g. for white goods) help consumers to buy the products with the least environmental impact. CENELEC has recently started work to enable labelling of electric and electronic products with regard to subsequent disposal in support of the WEEE directive.

Although it is impossible to draw overall conclusions on how environmental aspects are integrated in practice, it can be established that integration takes place when significant stakeholders press for it, either directly towards the standardisation organisations and the standards work, or indirectly by putting pressure on the market to provide environmentally friendly products, which then leads to a need for adequate standards (such as standards for lead-free electric cables).

In the European context, the Commission constitutes a significant stakeholder in favour of more environmentally friendly products and the inclusion of environmental aspects into standardisation. The Commission is currently preparing a policy in this field. Furthermore, the Commission is planning a directive for energy-consuming products, which will oblige produc-

ers to perform an environmental impact assessment of their products already during the design phase.

Fig I. Some of the standardisation bodies, environmental NGOs can join to increase environmental aspects in standardisation.



3 Case Studies

The first challenge faced by the DN in the project was to select the work items, standards and committees on which to focus. The second task was to learn the basics about the realm of standardisation. A third problem was to get access to national and international committees. Fourthly, a decision had to be made as to how active DN should be, and within which of the various national and international forums DN should spend its scarce resources and allocate its efforts.

At the beginning of the project, DN dedicated much time to mapping out the entire standardisation process in order to substantiate the subsequent selection of relevant work items. For a newly introduced actor such as DN, it was time-consuming to prepare carefully crafted studies of the rather chaotic world of standardisation, with its numerous international standardisation bodies, multiple stakeholders and over 30,000 international standards. The Danish Standards Association made an inestimable contribution to the project in this process. The Environmental Section at DS supplied the insights, which informed discussions of current work items in the various committees or working groups, and of their environmental relevance. This saved DN from a resource-draining activity. Initially, DS and DN were jointly able to select a large number of relevant technical committees, which could be narrowed down in a second phase.

The project timespan of a "short" three-year period was another criteria that had to be considered in the selection process. Standardisation processes can be very long and continue over several years. This might

drain the participants for resources but also for the energy and commitment that is necessesary to perform well in the process. DS was aware of this, and supported DN in selecting areas where the standardisation process was active and in progress.

The initial shortlist was based on the work items' relevance to the four strategic elements: criticism, lobbying, self-management, and point-by-point strategy. (See project objectives under I.3. Project outline). However, as more than one strategy could be employed concerning several selected standards, the strategies generally served as minimum screening criteria.

In the narrowing-down phase a second set of criteria were applied. DN should be able to add competent capacity to the standardisation process in order to contribute actively and qualitatively to the process. The selected participating DN staff should have time available to take part, as well knowledge and insights concerning the standardisation work item or subject. DS uses the same key criterion when recommending national experts for the committees, who must be capable of supplying qualified inputs. Moreover, DN participants should be familiar with DN policy and be generally aware of public and political opinions on the issues.

Given the available staff, combined with the environmental relevance of the various standards, 6-7 standardisation areas were chosen.

The selected technical committees or areas were:

· Two Technical Analysis Standards commit-

tees at DS, serving as mirror committees to the equivalent CEN and ISO Committees.

- The Environmental Management Standard Committee at ISO and the DS mirror committee.
- Electrical and electronic equipment stan dards committees at CENELEC and the DS mirror committee.
- The Danish horizontal environmental mirror committee and the Strategic Advisory Body on Environment at CEN (CEN/SABE), and lobbying towards the EU Commission and EU Parliament in conjunction with EEB.
- Outside the standardisation bodies, but under the EU Commission, a committee supporting the Integrated Pollution Prevention and Control Directive (IPPC), producing Best Available Technology Notes for Intensive Livestock Farming.

DN surveyed the policy expertise of its own personnel, attempting to match all the committees. In February 2000 DN had selected its participating staff members. DS supplied the information and material on the committees' agenda, and invited the DN participants to join in the committees. DS also introduced the new member DN to other experts in the committees. DS has the right to suggest and select national experts, and as an organisation, DS made a highly valuable effort to introduce DN into the realm of standardisation. In this phase, DS had a key role in the project's success.

This report will refrain from giving a detailed case description of the participation in the electrical and electronic equipment standards committees at CENELEC (/BTWG 85-3) and the corresponding DS mirror committee (/S-500/U-85/A-03). Although DN took part in this committee, in the period from 2000 to 2003, its activity level was very low. The case would not reveal much new insight.

The case could, however if active progress had been made, have produced insights into NGO participation under the "New Approach". CENELEC's work item covers both monitoring and lobbying of EU directives and mandating processes, in addition to the preparation of standards itself. The work item is the EEE directive, a new harmonising directive on electrical and electronic equipment and the corresponding standards, which specifically mentions improvement of the environmental impact (see case 5).

The low activity level in this committee is, however, an example of how standardisation processes may be very prolonged, and how the activity level may rise and fall in waves. In relation to this DN project and other standardisation projects it is relevant to comment that patience, "endurance" and long-term commitment was to be expected by the participants.

A general experience that covers all the selected cases is the importance of a mediator able to support the NGO with scarce resources in the setting of priorities and selection of standards to work with, subsequently introducing the NGOs to the committees. In this case, Danish Standards Association contributed strongly towards the success in the initial phase of the project. The active involvement of DS, introducing DN to the whole set-up, smoothed the process.

However, an important point is that DS, together with the Danish EPA, on the international scene are active champions of including environmental aspects in international standardisation. This is a view shared by many of the Danish committees under DS, and in general, the introduction, support and efforts of DN was strongly welcomed in the Danish setting.

Case I. Technical analysis standards

3.1 DS mirror committees on methods of analysis.

DS (Dansk Standard), has established a special technical work group: Methods of Environmental Water Analysis, S-168, and a cross-cutting Danish technical committee: Environmental Chemical Methods, S-345. The committees are central pools of knowledge concerning technical methods of analysis in Denmark. Wherever the committees' work items overlap, they co-operate and share out the tasks.

3.1.1 DS/S-168

The history of the Danish S-168 committee dates back to the beginning of the 1970s and 80s, when several environmental bills were passed by parliaments throughout Europe and the world, while enforcement of environmental regulations was strengthened. Water pollution took centre-stage. It became clear that unified methods of sampling and analysis were needed, if regulations based on water-pollution emission and immission limits were to be enforced. One task of S-168 was, and still is, to create Danish standards and guidelines on methods of analysis in line with the regulation of water pollution.

The committee's tasks and focus on national methods changed alongside the shift from national towards international regulation, especially within the European Union (EU). Apart from a few Danish standards and guidelines, S-168 now works mainly as a Danish technical mirror committee to the international com-

mittees. S-168 "mirrors" and participates in CEN (European Committee Standardisation) on "Water Analysis" (CENTC 230) and in ISO (International Standardisation Organisation) on "Water analysis" (ISO/TC 147). S-168 committee members and DS have been appointed as chairmen and secretariat for the international work groups (ISO/TC 147/ WG2) and (ISO/TC 147/SC 4 /WG14) sensors/analysers" "on-line "Campylobacter" respectively. Moreover, S-168 focuses especially on the international standardisation of "sampling" (ISO/TC 147/SC6). Each committee covers multiple standards. Priority has been given to CEN standards that are generally related to EU drinking-water directives and water-preservation directives. As ISO standards are prevalent and leading, these have been at the centre of attention.

The scope and tasks of S-168 are technically highly specialised. Most work in S-168 and a number of Danish S-168 subcommittees is based on detailed chemical, microbiological, microorganic and biological expertise. Methods of analysis cover a wide variety of specific and complex technical methods and detailed aspects, ranging from the storage time of samples to specific technical output differences between the various methods. Current knowledge of the latest trends in this profession is a prerequisite for the group's adequate performance. One member stated that it has taken almost seven years to fully comprehend the issues and function properly within the

committee.

The committee members comprise technical experts from ministries and ministerial agencies, private accredited test laboratories, universities, utility firms (waterworks), from the Society of Danish Engineers, and, from 2000 to 2003, also from the Danish Society for Conservation of Nature (Danmarks Naturfredningsforening, DN). Several experts have many years of experience in the committee.

The work items of S-168 have been given high priority by the authorities in relation to environmental impact. The precision of the methods of analysis is, naturally, decisive when it comes to e.g. measuring the impact of specific polluting and hazardous substances and their concentrations in water. One of the latest issues discussed in S-168 has been a change towards standards friendlier to the environment and occupational health. In order to replace environmentally hazardous substances, used as a part of the process of analysis in the laboratories, efforts have been made to find other methods or substances.

Despite the high priority attributed to the S-168 committee's work, only two meetings were held in the period from 2001 to late 2002. However, in the same period, work was carried out by S-168 subcommittees and by the DS secretary.

3.1.2 DS/S-345

The history of S-345 dates back to 1996. As a Danish mirror committee on "Physical, Chemical and Biochemical Methods", S-345 is a national parallel to

the various international CEN and ISO technical committees, special groups and working groups for environmental chemical test methods of soil, water, sediments, sludge and waste,

respectively.

Due to the wide variety of topics/work items covered, S-345 reports to at least 10 international CEN and ISO committees and working groups (e.g. CEN/ TC 308/ WG I "Characterisation of Sludge", and ISO/TC 147/ SC 2 "Physical, Chemical and Biochemical Methods"). S-345 deals with all work items from these committees, and has a wide range of experts among its members.

Committee members include technical experts from ministries and ministerial agencies, public and private accredited research facilities, private accredited test laboratories, utility firms (wastewater/sludge), large-scale waste-handling facilities, and, from 2000 to 2003, also representatives of the Danish Society for Conservation of Nature (Danmarks Naturfredningsforening, DN). Several of the experts have many years of national and international experience in the committee and other standard committees.

In its scope, S-345 is similar to S-168. Like S-168, S-345 monitors, and participates where appropriate, in all the work of the international committees. At present, S-345 decides its focus against the following criteria:

- · Demand for standards.
- · Environmental concerns.
- Environmental issues. Polluting chemicals in methods of analysis.
- Usefulness of results.
- · Occupational health in laboratories.
- · Practical usage in laboratories.
- · Harmonising of different standards.
- · Compliance with directives and regulations.

In addition to the work on international standards, S-345 produces Danish amendments, guidelines and comments on usage.

S-345 meets three to four times a year, and in

the period from 2000 to July 2003, I3 Danish meetings were held. Moreover, the members have participated in several international meetings as Danish experts. The experts work with mandates from S-345 and thus, as NSB representatives, argue for Danish perspectives in these international committees. These technical standards give rise to less conflicts of interests, and consensus among the experts is easily built, making it a prolonged but smooth process.

3.2 DN participation

DN participated with one representative (name: AA) in the Danish S-168 and S-345

the results, such as pollution limits, which substantiate political decisions and enforcement of regulation. The accuracy of the methods and their measurements of polluting substances thus impinge upon the actions to be taken.

AA is a biologist by profession. Prior to his 17 years of employment in DN, he worked for 11 years with biochemical methods of analysis in the private and public sector. At DN, he provides general technical and legal support for members, the DN management, and local/regional DN sections in their capacity as NGO advocates of conservation. One key task is to comment on environmental permits. As



Should the standards of analysis take account of the health and safety of laboratory workers?

meetings between 2000 and 2003. The DN representative was carefully selected among the organisation's staff.

The working area of both committees are of interest to DN and the public at large. This is because refined methods of analysis produce

a long-time staff member at the head office, AA is familiar with the environmental mission and policies of DN. AA has worked on environmental issues throughout his career.

The DN representative thus has the core competence needed to take part in highly technical standard committees. Nevertheless, AA was not completely up-to-date on the latest issues concerning methods of analysis. Upgrading

AA's knowledge would have been too time-consuming for a three-year project. Although AA was prepared to update his capacity, during the survey, AA and other experts expressed that the latest knowledge of these technical methods of analysis is best acquired by using them in day-to-day work.

Unfortunately, AA was unable to attend any of the two S-168 meetings held in the period from 2000 to 2003, but he prepared himself and monitored all material/work items from the committee. AA attended about 50% of the Danish meetings of S-345, but did not participate in any of the subcommittees nor in any of the international committees. Danish participants at the international meetings of the committees and subcommittees are generally experienced experts from the mirror committees. AA was convinced that these experts presented the Danish views after consulting with, and hearing the decisions of, the mirror committees. AA had no reason to believe that representation by an associate NGO would change or improve the efforts at these international meetings. In general, DN and other Danish experts held the same views on these technical methods.

During the period from 2000 to 2003, AA spent much time preparing for the work on S-168 and S-345 work items. Each meeting took several hours, or even days, of preparation. However, AA considers that more time were needed to fully comply with the workload of the committees. Unsurprisingly, an optimal contribution to the meetings was only possible if preparation had included the following checklist of minor tasks: reading, studying and examining additional research on specific issues, searching for new material/information, and preparing notes and memos to be presented at the meetings. However, AA gen-

erally considered it most important to prepare for the meetings by screening the documents and material, selecting topics to be raised, and presenting the views orally at the meetings. AA did not find it necessary to produce any notes, memos or proposals for amendments in the period.

Over the three-year period, many work items of S-168 and S-345 could not be completed, while others had been on the agenda for many more years. AA was thus confined, firstly, to catching up, and later to following up on the work items already on the agenda. AA believes that a period of three years was insufficient to become completely familiar with the work of the committees. AA concluded that he could not contribute much new information to the technical matters of the work items. AA also concluded that the other Danish experts were generally much concerned about environmental issues, and that no conflicting interests or disagreements between the NGO and the other experts were detected concerning the technical matters.

The other committee experts mainly welcomed the NGO representation. In this case, the others even knew the DN representative. When asked, the experts reply that "it was important to have participants from environmental NGOs", and that NGO views made it possible to see their work from the perspective of the overall purposes of methods of analysis.

Especially on two less technical subjects, the NGO perspectives were highly appreciated during the three-year period: general priority-setting and (quote): "if environmental matters and matters in relation to occupational health should be prioritised or if we <the committee>should only concentrate on technical matters".

In the latter case, the DN representative argued that all general safety aspects should be taken into account, including occupational health. In general, the other experts also praised the NGO for focusing on the methods' environmental impact. The strong focus on removing hazardous substances from the methods of analysis was mentioned by the experts as a central and important DN contribution.

In the survey conducted for the evaluation, a few other experts expressed it that was unnecessary for NGOs to be present in these technical committees, arguing that they were unable to bring much new information that was not covered by the other experts.

DN employed a clear point-by-point strategy, in which AA participated as an expert, on equal terms with the other experts. The strategy was to bring aspects into the debate on specific standards, and to supply new insights into the topics.

AA concludes that his efforts in the committees were appreciated, that his views were welcomed, and that some footprint was left in the meetings' decisions and minutes. However, AA believes he was unable to add much in terms of increasing focus on environmental concerns. The other experts were generally not in conflict with the environmental NGOs' views or with the public's interests in using the best available techniques.

It remains unclear whether the international committees share the views of the Danish committees. However, it seems likely that opposition towards the NGO representation would be stronger in international forums. However, as for the force of Danish views in these forums, greater NGO commitment

would only strengthen the arguments and counterbalance other views.

Case 2. BAT reference notes

Under the EU, the European Integrated Pollution Prevention and Control Bureau (EIPPCB), has been established to catalyse an exchange of technical information on best available techniques (BAT) under the EU IPPC directive, and to create reference documents (BREFs), which must be taken into account when member states lay down the conditions for IPPC permits. BREFs are important standards for the implementation of environmental issues in new products and processes. Combined with advice from DS and the project steering group, DN chose to participate in the Technical Working Group (TWG) on completing a BREF on "Intensive Livestock Farming" (BREF ILF).

3.3 BREF on "Intensive Livestock Farming"

A TWG was established as early as 1999 on "Intensive Livestock Farming". EIPPCB supplied

the competent secretariat to the TWG. HoweverTWG meetings were postponed and the BREF completion deadline extended, as the professional TWG secretary had to be replaced.

Experts from all EU member states, industrial NGOs (industry associations), the EU commission and non-EU members were invited to participate. At the end of the year 2000, DN was introduced to the group as an environmental NGO member. Of the 60 TWG-ILF experts, I4 EU member states had between I and 6 national experts (66.8%), the Commission was represented by 4 members (6.6%), non-EU members by 3 experts (5%), the industry associations had I2 experts (20%), and the environmental NGO I expert (1.6%). Many member-state experts are national EPA or ministerial civil servants as well



The increasing number of intensively farmed pigs will be regulated under the IPPC.

as technical consultants/advisors. Denmark contributed two experts in addition to the DN expert.

A simple survey and comparison with other BREF TWGs show that the distribution of members in TWG ILF follows the same pattern. TWGs generally consist of a large group of experts from industry associations, a smaller group of EU Commission civil servants, a large group of state delegations of various sizes, and, in some TWGs, a single environmental NGO.

TWG members are expected to avoid raising political views and opinions in the BREF, and to confine themselves to writing technical documents within the scope of the IPPC directive. The cost of implementation is to be considered in the BREF.

The TWG meets approximately twice a year, but its members have been asked

to comment on draft documents and submitted documents throughout the period. In the TWG ILF, 220 technical documents have been submitted by the experts and registered as background material. The material is substantial.

The BREF ILF is intended to be standard BAT conditions for the member states' permission to establish intensive livestock farming. The purpose is to reduce environmental impacts from intensive farming. The BREF covers "pig farming, and poultry farming" but leaves out "cattle farming". The note is very specific and technical on several issues, and it covers a variety of techniques from manure spreading to the actual design of equipment, stables and buildings. The BREF mandate is produced as an environmentally-oriented response to the general (economic) development in Europe, where intensive farming is on the rise.

The BREF ILF of 400 pages was released by the Commission in July 2003, and it is publicly available on the FIPPCB website.

BREFS are expected to be revised every three years.

3.4 DN participation

DN has a keen interest in influencing the development of intensive farming. The change from traditional farming methods into intensive farming has an increasing environmental impact on man's cultural use of nature. Intensive farming is believed to be the single most harmful "industry" that changes landscapes, has a negative impact on biological diversity, degrades soil, ground and surface water and contributes to air and smell pollution. Intensive farming is basically contrary to the conservation of nature, including ethical aspects of animal welfare. DN policy clearly reflects this conflict. For instance, the DN chairman's comment on EU Common Agricultural Policy states that: "Since its inception, [it] has promoted intensive agriculture to the detriment of the environment. and natural values in the present EU countries. The Agenda 2000 reform was a step in the right direction, but we need much more emphasis on environment and nature, including organic production methods" (in "Closing the Gap" by DN, January 2002).

On the other hand, DN recognises the great importance of reducing the impact of intensive farming. Consequently, DN entered into the project with a sceptical attitude, but chose to participate in the BREF to get maximum influence on the process.

DN participated with one expert (RL) in the TWG ILF meetings between 2000 and 2003. RL is the Agricultural Policy Officer at DN since

1996, and she is a graduate agronomist. Before employment at DN, RL had a professional career as private agricultural consultant and consultant to local farmers' organisations. RL's experiences of farming methods are wideranging, but the main focus is on cattle farming. At DN, RL deals with all agricultural questions and support to the local DN regions. RL must be considered a professionally competent member of the TWG ILF, and has a strong knowledge of the policies of DN and other environmental NGOs.

In the period from 2000 to 2003, only two TWG ILF meetings where held, due to the change of secretary. When DN was introduced to the group in 2000, a second draft BREF ILF document was already finalised, and this paper was completed as a final document as soon as possible in the autumn of 2001. Consequently, the two final meetings were scheduled and held, one in January and one in February 2002.

Radical discussions on the implications of intensive farming opposed to other methods, such as organic farming, were not accepted in the TWG. DN considered itself caught in a dilemma, as the organisation wished to discuss the principles of intensive farming in general, but was restricted to discussing the reduction of impacts from intensive farming. Moreover, changes and amendments were difficult to raise at this late state of negotiations. Suggestions for major improvements of equipment, stables and building designs were not allowed at this point. Arguments and contributions accepted to the BREF were generally only late adjustments to the final document. It should also be noted that economic and implementation costs are an integral part of a BAT, diminishing the term's true potential, and reducing options to be included in the BREF.

RL notes that her introduction to the TWG came too late to table any major arguments in favour of alterations in the BREF. The other experts had already prepared the draft.

DN chose to focus on the inclusion of general recommendations. At the TWG ILF meetings, RL argued for the inclusion of general clauses in the BREF on greater commitment by farmers to integrate environmental aspects, and to focus on agriculture's vast scope for reducing environmental impact. These arguments were registered in the minutes, but it has not been possible to conclude to what degree they were included in the final BREF as such.

RL believes that the Danish situation of intensive farming is different and far ahead compared to other nationalities. A dialogue on the environmental issues of intensive farming has been part of Danish environmental policy for several years, including mandatory EIA (environmental impact assessment). RL recognises that the BREF could be a step forward for less advanced countries, but whether the BREF ILF will make any difference in Denmark has yet to be seen. RL argues that the BREF ILF is a lowest common denominator document/standard rather than an advanced BAT document.

RL chose the strategies of criticism and of self-management. By supplying both critical statements, but also argued for the inclusion of 'demands of environmental reflections and assesments' within the BREF. The purpose being that some of the environmental decisions would be left to the users of the BREF, with high environmental standards, and not made by rigid common denominator standard demands and low preset limits. RL left a small footprint that an element of self-management by the farmers would be an integral part of the BREF.

DN views were heard among the other experts, although they were reluctant to include the arguments and strengthen the demands in the BREF. In this respect, it was also notable that the Danish delegation shared many of DN's views. However, the mandate of the TWG ILF prevented the delegation from discussing general or basic impacts of intensive farming compared to other production methods.

Notwithstanding the critical arguments, the other members appreciated the environmental NGO's participation. The survey reveals that a member stated: "RL contributed actively and constructively in the concluding 2nd TWG meeting. RL also made some valuable contributions that were helpful in finalising the BREF". DN has set a footprint on the BREF. The general idea of including NGOs in the discussions is welcomed, especially by E IPPC B. But the survey on this case cannot reveal the views of the majority of experts on NGO participation. The experts questioned expressed no critical views.

RL spent extensive time on preparation, document reading and on the two two-three day meetings at E IPPC B in Seville, Spain. RL would have spent even more time on the tasks, if the BREF ILF had not been delayed, hence rushing for finalisation in the beginning of 2002.

Case 3. Environmental Management Standards

Since the first Environmental Management Standards were introduced in the early 1990s, and the ISO 14000 Environmental Standards series were released in 1996, there has been tremendous growth in the usage of EMS standards. They have been adopted worldwide, and consequently given rise to a global interest in their form, contents, usage, and not least the results of their usage. Expectations of the longterm environmental performance and effects of the standards are high, and many stakeholders spend much time and funds on the development of these standards. The global standards are produced under ISO in the Technical Committee 207, whose work is closely followed by the Danish mirror committee S-283.

3.5 ISO/TC 207 and DS/S-283

3.5.1 ISO/TC 207

The scope of the International Standard Organisation Technical Committee: ISO/TC 207 is: "Standardisation in the field of environmental management of tools and systems".TC 207 covers a large area of standards that are "improving management practices as the best way to improve the environmental performance of organisations and their products" [TC 207 Scope].TC 207 was established on a mandate or "request" from the UN environmental conference in Rio 1992, focusing on standards for businesses of all sizes.TC 207 has five subcommittees on 'Management Systems' (SCI), 'Auditing & Related Investigations' (SC2), 'Labelling' (SC3), 'Performance Evaluation' (SC4), and 'Life Cycle Assessment' (SC5), and now two working groups on 'Environmental Communications' (WG4) and 'Climate Change' (WG5) (three WGs have just been disbanded, e.g. 'Design for Environment' (WG3) and 'Environmental Aspects of Product Standards' (WG1). The TC 207's general meeting did not gather support among national standardisation bodies (NSBs) to continue these WGs after the completion of their work items.) All SCs have established up to five WGs each, focussing on selected aspects of the SCs' work items.

TC 207 is the largest technical ISO committee with 69 (nationally-accredited) voting members, 19 (national) observers, and 46 liaison organisations. The national members consist of delegations of nationally selected experts from both authorities and private sector. The liaison members encompass both environmental NGOs (e.g. European Environmental Bureau, EEB), industrial sector organisations (e.g. International Chamber of Commerce, ICC) and inter-governmental organisations (e.g. OECD). A few of the national standardisation bodies' delegations include various NGO representatives.

TC 207, the subcommittees and working groups have extensive work programmes, in order to manage and improve the approximately 30 standards, and corresponding guides, as well as the technical notes to other related ISO/TCs. The background material and documents are substantial for each SC and WG, as are the number of experts involved in the work. Every second year, TC 207 meets to vote and agree on new initiatives under the principles of consensus. In between, the SCs and WGs meet regularly, and conduct consultations over the Internet.

The scope of the TC 207 is, in principle, not political, but more or less technical. However, as the ISO 14000 series deals with sustainable development, and often complement national regulation and business policy issues, political aspects and strong national preferences influence the work. Both SCs' WGs are thus constantly addressing real issues of environmental policy and politics.

An NGO Task Group was established and registered at TC 207 in 2001. Extensive lobbying. pressure on the chair of TC 207 and on the general meeting had been exercised in the years prior to registration. Especially "Pacific Institute", an independent research centre based in Oakland California, has funded the lobbying in favour of NGO participation. Other NGOs, e.g. from Australia and Germany, including the NGO umbrella organisation European Environmental Bureau, also supported the work. Many discussions on the relevance of NGO participation among the delegates preceded the decision to accept the task group. The task group was asked to argue for the involvement of NGOs in the TC 207's work. At the July 2003 meeting, the NGO Task Group delivered a report (N590) on the NGOs' potential contributions to TC 207. In 2003, it was concluded that TC 207 would create an ad hoc Task Force of NGOs and members from the TC 207 Chair's Advisory Group (CAG). The NGO Task Force mandate is to "provide recommendations to the CAG...and TC 207...on the N590 Report". Moreover "TC 207 welcomes the initiative of the NGO participants in TC 207 to establish an NGO Forum" [TC 207, 2003, Resolution].

The establishment of the TC 207 CAG Task Force on NGOs is an indicator that the standardisation organisations welcome a multistakeholder approach.

3.5.2 DS/ S-283.

DS/ S-283 is the Danish mirror committee of experts to TC 207. The committee is given high priority by DS.

28 experts from the Danish EPA, private technical and communication consultants, special experts, universities, environmental NGOs (DN), trade unions, regional environmental authorities, public health authorities and private enterprises make up the committee.

The activity within S-283 matches that of TC 207. Four Danish Working Groups on 'Tools', 'Systems', 'Communication' and 'Symbols' have been established to match the TC 207 WG. The Danish experts participate actively in the ISOTC 207, SCs and WGs. Denmark has been an active contributor to TC 207's work since its start, and has been active in formulating the documents, especially on 'Environmental Management', 'Labelling', 'Life Cycle Analysis' and 'Design'. The S-283's Chair has been a member of the TC 207 Chairman's Advisory Group, until 2002. Other experts have been assigned to central project-leader tasks in some of the WGs and to a chairmanship of the SC/WG4's "Environmental Declarations".

The importance of S-283 work on, and close monitoring of,TC 207 must be seen in the light of Danish environmental legislation practice. Voluntarily implemented environmental management systems like the EU Environmental Management and Audit Schemes (EMAS), combined with self-assessment and internal audit schemes on compliance may be included in legal environmental permits. The development of standards is thus important to the enforcement of, and compliance with, the legal framework. For enterprises as well as authorities, the scope and actual detailed formulation of standards in TC 207 will influence the level of environmental control.

3.6 DN participation.

DN has a political interest in participating in the development and revision of the ISO 14000 standards series. As an experienced, officially-appointed consultation stakeholder concerning environmental permits Denmark, DN has a strong and explicit interest in the scope and layout of standards. This is because standards underpin the environmental performance of many enterprises, and are a key instrument for continued collection of knowledge of businesses' environmental impact. Apart from serving to improve environmental performance, standards are a tool for implementing life-cycle assessment, for communication strategies and possible cooperation with local and other stakeholders. The standard series are often used as a business management tool in changes towards sustainable development and conservation. In Denmark and other countries, it might even become a stronger voluntary tool in regulation strategies.

DN participated with two members in the DS/S-283 and ISO/TC 207 committees from 2000 to 2003. In 2003, the first participant was replaced due to a leave of absence. The DN representative from 2000 to 2003, (MM) is a graduate Master of Political Economy. His experience covers EU environmental policy and the focus on the EU New Approach to technical directives. Since 1993, MM has worked on standardisation in various projects during his graduate studies and dissertation. Since MM's employment at DN in 1998, his tasks have encompassed EU policy and international information activities.

In 2003, MM was replaced by LA. LA holds a Bachelor of Science in Construction from 1991, and a postgraduate degree in Environmental Economics from 1994. She had

a career as environmental consultant on implementation of EMS from 1991 to 2001. Her experience covers the practical use of various standards, including the ISO 14000 series. At DN, she works as an advisor and consultation officer on environmental permits and green accounts. Moreover, she has experience of environmental-technology capacity transfer projects.

Both DN representatives were professionally competent members of the committees. Their experiences of practical standardisation processes were limited. However, through their professional careers, they had gained insight into the process at EU policy level and the practical usage of standards.

DN attended DS/ S-283 meetings and the two international ISO/ TC 207 general assembly sessions in 2001 and again in 2003. Apart from general participation in TC 207 and S-283, the TC 207/SC1 'Management Systems' was selected as the focal point of DN's attention. The DN representatives did not attend any of the international TC207/SC meetings. However, through the S 283 meetings, DN could follow the process of the SCs and WGs just as well as other Danish experts.

The difficult choice and selection of DN's areas of interest was a priority matter due to the limited time and resources, combined with an evaluation of available competencies at DN. Since 2001, DN chose to divide its efforts into two focal areas: active participation in DS/ S-283 and membership of the TC 207 NGO Task Force.

In 2001, the Standard 14001 Environmental Management Systems was up for its five-yearly revision. Since 2000, DN had focussed on this revision with the intention to espouse major

improvements in the enforcement of required environmental output performance. In 2001, TC 207 SCI decided to make only minor modifications of the standard, and not to add new elements nor include substantial changes. From the point of view of the DN representative, the strong involvement seemed to have been ineffective. DN decided to scale down its efforts on this work topic, adding it to the DN observation list instead. DN has since presented its views on the revision through the agenda of S-283.

In 2001, the NGO Task Force under TC 207 was established. The task force was asked to present a report to the 2003 meeting on NGO involvement. NGOs had traditionally not been associate members of the TC 207, and most NGOs participated as representatives of their respective national delegations. DN decided to target its efforts on the work of this task force. Three issues were identified for this report: funding of NGO participation in standardisation, structural and procedural barriers, communication of TC 207's work, DN decided to work on the structural and procedural barrier section together with NGOs from Germany and Australia. DN has supported this work, and was active on the formulation of inputs to the N590 report. The chosen NGO Task Force Chairman presented the report at the TC 207 meeting in 2003.

DN attended both international meetings and was able to present input to the NGO Task Force. Together with the other international NGOs, DN argued for a more open and transparent standardisation process, where all stakeholders are able to take action. Restricted by their funding capacity, the NGOs have less chances than industrial experts to participate and address all the work items on which they may have an opinion. DN wants to continue its

efforts to deliver information to be considered at TC 207. However, this work is very time-consuming, with several days of preparation for each meeting. DN was only able to contribute resources to the meetings and the N590 report due to the project's limited external funding.

An important outcome of DN's participation in this area is the cross-border co-operation between national and regional NGOs. At the TC 207 meetings, the NGOs met to share views and strategies. Although the NGOs are geographically spread, they have agreed on another common global cause to work for, and a small international network is taking shape. The survey on this case indicates that there is growing international agreement and understanding among NGOs on the importance of their participation in standardisation.

DN has been active at S-283. The information flow from S-283 to DN has been an active tool in DN's effort to stay up-to-date on the technical issues of the ISO I4000 Standard Series. An important aspect revealed by the survey was that other S-283 experts also felt updated on the NGO's views, and that they welcome the dialogue on critical topics raised by the NGO.

MM and LA believe that DN participation made it possible to add new views to the work items. However, it is clear that resources are too scarce for the NGO to work on the technical items and WGs. Therefore, the influence seems to be less than expected. MM and LA argue that standardisation is long-term work, and it has been difficult to ensure stable and continued input/pressure to the process

It is also clear that DN's lack of experience of the practical process was a barrier to be overcome, and that familiarity with the process would have enhanced the efforts.



Harbours and the transport sector in general have adopted ISO 14000 Environmental Management Standards, affecting environmental impact performance in international trade.

When guestioned, other experts in the committees and working groups argue in favour of NGO involvement: "A multi-stakeholder approach is always beneficial as additional views are brought forward, and the potential results are challenged/tested". Another expert adds, " the more stakeholders we can get into the consensus process as an active part, the better. It will give more credibility to the results". When asked about the legitimacy of NGOs in the process of ISO 14000 and other environmental standardisation, an expert replied that "NGOs are legitimate partners, however it is important that the representatives have sufficient knowledge of the subject". Another experts added: "Not all NGOs are legitimate participants. They will have to demonstrate a certain membership basis as well as sufficient technological and organisational strength to participate".

DN had to allocate much time to the prepara-

tion of the ISO work. DN participated in the international TC 207 meeting in 2001 and 2003. Both participating members have been travelling and participating in the two international meetings of up to 5-7 days, in addition to attending the Danish meetings of S-283. S-283 has met two or three times a year between 2000 and 2003. Allocation of the time needed and travelling expenses for meetings have only been met thanks to the external project funding. Continued high-level efforts depend on continued funding.

DN initially applied the strategies of criticism and of point by point. During the process the lobbying strategy was applied, as the point by point strategy in this case, seemed less fruitfull in terms of influence and consultation on the actual formulations in the standard. However by lobbying, the possibility to monitor the adjustment process and to be able add actual comments in the standards is still open .

Case 4. Horizontal Advisory Committees

CEN/SABE is the European standardisation organisation's "Strategic Advisory Body on Environment", and DS/FAU 3-2 is a horizontal advisory group for the various environmental working groups of the Danish Standards Association.

3.7 CEN/SABE and CEN/EHD

CEN/SABE was established in 1998 with the aim of satisfying a number of needs in the field of environmental standardisation. Six issues have been identified: I) exchanging information between stakeholders, 2) identifying areas in which European standards may support European environmental policy, 3) bridging between EU activities and global standardisation activities, 4) co-ordinating environmental issues between CEN technical committees, 5) creating and updating CEN's strategy on such issues, and 6) advising the CEN's Technical Board on Environmental Issues and following up the work of both CEN and ISO environmental committees.

The CEN/SABE's mission is to pursue these aims through assistance to the CEN's Technical Board on EU-mandated negotiations, ensure integration of environmental aspects, balance decisions by the CEN Board on environmental issues, encourage the exchange of information between all stakeholders ensuring that all relevant environmental issues are taken into consideration, follow ISO environmental work, where no other CEN committee exists, and promote quality consistency and transparency in standards development activities related to environmental issues.

Moreover CEN/SABE establishes and moni-

tors subgroups for specific tasks. Currently, at least three or four subgroups (called "teams") are created. I) Environmental Management/ EMAS, 2) IPPC WG Monitoring, 3) Environmental TCs Co-ordination Team, and 4) ENIS. The CEN/EHD Environmental Helpdesk is also placed under CEN/SABE. ENIS monitors CEN/EHD

CEN/SABE is currently working on the EU Integrated Product Policy and the revision of the "New Approach".

SABE's general meeting is held twice a year. Teams meet more regularly, and hold consultations over the Internet. General meeting delegates are: the NSBs (2 x 22), CEN Management (2), CEN/TCs on environmental issues (5), CEN associates (8), industry organisations and NGOs (2), EU Directorate and EFTA country delegations (5), and finally other international standardisation bodies (5). The figures refer to the recommended number of participants. SABE recommends that the committee should not exceed 50-60 delegates, thus leaving room for only one regular NGO participant, one possible NGO membership through the CEN's associate status, and one NGO representative as a possible official delegate of each NSB.

The CEN/EHD was established in 1999 to help promote environmental awareness across CEN technical committees. EHD's mission is to integrate environmental aspects into standardisation, to raise awareness among CEN technical committees, encourage environmental discussions and evaluate European standards from an environmental perspective. The

helpdesk is planned to assist technical committees and working groups in including sustainability issues and making the most of their opportunities. EHD has an advisory function to the committees, and uses environmental guidelines, databases and sources of information as its central tools, not to mention the vast experiences of its staff.

The helpdesk was meant to be staffed by two experts. However, due to scarce resources, in practice only one person has been employed at this central point of information. As support to the staff, EHD has begun to create a European Network of Environmental Experts. This network is partly financed by their respective NSBs, or their work is based on philanthropy and voluntary commitment. NGOs may join this network.

3.8 DS/FAU 3-2

In Denmark, DS has established DS/FAU 3-2, a joint horizontal committee to monitor individual environmental committees. FAU 3-2 also functions as a mirror group and channel of contacts to CEN/SABE.

FAU 3-2 is very active and has, through the DS participants, been a leading actor in CEN/SABE for the creation of environmental guidelines, support of CEN/EHD and information leaflets.

FAU 3-2 has produced a set of environmental guidelines for the Danish committees, and conducts courses on integration of environmental aspects for experts in the working groups. An essential discussion in the group has been the general change of focus from CEN standardisation towards ISO standardisation. Globalisation has moved many issues from a European setting to an international one.

The members of FAU 3-2 are representatives of Danish EPA, The Confederation of Danish

Industries, Danish technological institutions and consultants, several DS staff and secretaries of the environmental committees and working groups, Danish trade unions, Danish Consumer Council, Danish Association of Regional Authorities and, since 2000, DN. Chairmen of the environmental committees and working groups are often present at FAU 3-2 meetings. (In the period from 2000 to 2003, Danish EPA left the committee due to budget cutbacks.)

3.9 DN participation

DN participated in both CEN/SABE and DS/FAU 3-2 from 2000 to 2003.

DN had one person (name: PO) in the committees. PO is finalising a Master of Political Science in the spring of 2004, and is DN's Global Policy Officer. PO has an ongoing career as consultant to the Danish Council of Agriculture, and has conducted other political information work. In DN, PO has served as one of the NGO members of the official Danish delegation to international meetings and summits. PO is experienced in the political dimension, but had only few experiences of standardisation prior to the project. PO is a competent actor as political observer, presenter of arguments and lobbyist.

The work in the two committees must be seen in connection with the general political lobbying towards the EU and Danish authorities. In addition to monitoring working groups, the committees would generally be consulted and invited to comment on political decisions and action programmes concerning standardisation. Both "the new approach" involving initiatives to draw up mandates, CEN and ISO proposals are discussed in these committees at an early stage. DN membership of these committees provides key information and insight into the process, particularly in relation to DN's selection and priorities regarding issues.

In the project period, PO participated in one of the FAU 3-2 environmental guideline courses for technical experts. PO sensed that some of the technical experts were reluctant to include environmental aspects.

Both CEN/SABE and FAU 3-2 experts welcomed DN as participant in the committees. The committees are not opposed to NGO participation, and see it as a natural counterbalance to other stakeholders. One expert expressed that NGO participation would only increase the committee's information level. Nevertheless, the main task of DN in the project period has been to secure NGO participation in the organisational set-up of standardisation. DN contributions indicate that the legitimacy of NGO participation was central to the debates.

An essential strategy in this effort has been to build an active alliance with the EEB (European Environmental Bureau). Together with EEB it has been possible to continue to put pressure on the integration of environmental aspects into standardisation internationally.

EEB was a CEN/SABE member, but withdrew in 2001, as a protest against, and as a consequence of, financial cuts and reallocations of earmarked funds within the FU Commission for environmental NGOs' participation in standardisation. CEN/SABE regretted this decision by the EEB. PO informed FAU 3-2 on the development of this case, and ensured that FAU 3-2, through DS, strongly supported the discussions within CEN/SABE in favour of NGO participation. DN was very active on this issue. The discussions resulted in CEN/SABE recommending the establishment of an NGO umbrella forum for standardisation. (See Case 5 on lobbying). The forum was established in 2002 under the name of ECOS.

This whole process was initiated as early as 1992, but no progress was made until 2000, when DN began to work actively for the establishment of ECOS. The positive result can be ascribed partly to two years of political lobbying, and partly to engagement at the horizontal strategic level of standardisation. Both the CEN/SABE recommendation and the political pressure supported the final decision to establish ECOS. As a final touch to this work, DN, FAU 3-2 and DS also put pressure on CEN/SABE to recommend the CEN Technical Board that ECOS be granted associate-member status at CEN. After an Internet vote among the NSBs of CEN, ECOS was given this right in May 2003. ECOS has been active as an associate member of CEN and in CEN/SABE since then, ECOS was selected among three applications for this consultative status and granting of finacial support. In this process, PO produced much-appreciated notes and presentations of the case for NGO participation.

Another item discussed in CEN/SABE and FAU 3-2 was the importance of strengthening the CEN/EHD's efforts. DN and DS supported the idea that the helpdesk should draw on the network of national experts. A survey conducted by the CEN/SABE team ENIS revealed that CEN/EHD was not living up to its full potential. The network of national experts was not activated or asked for assistance. DN and DS argue for increased use of these experts to make EHD more effective in integrating environmental aspects into standardisation.

The strategy of criticism and lobbying has been applied most vigorously on these work items. Both strategies have been supplementary to each other in this work.

Case 5. Political lobbying at the EU⁶

The EU's "New Approach" has spread the legislative process across more institutions. The work is divided among the top-level Council of Ministers, the European Parliament, the EU Commission. The General Directorate combined with national directorates, and possibly the standardisation bodies. The Council of Ministers and the Commission propose new legislation, and the Commission Directorate produce the directives, whereas the European Parliament may influence the process through budget allocations and comments. The general political issues of safety, health and environment are defined in the political directives and described in the essential requirements. Standardisation bodies within the framework of their mandates - are given a chance to define technical aspects of the directives, and develop the necessary number of standards.

Lobbying must be performed in a multipleactor setting. Each institution must be monitored to secure that the legislation process produce final documents and standards in line with the initial political intentions. In this process, the intentions may be weakened as well as strengthened, parts may be abandoned and new parts added. At each institution, experts and personnel may exercise decisive influence on the outcome.

3.10 DN participation

DN chose to follow four issues "The EU Directive on Packaging and Packaging Waste", "the Electrical and Electronic Equipment Directive", revision of the "New Approach" and the establishment of a "European Technical

Committee for Standardisation."

PO (see Case 4) and MM (see Case 3) were selected for DN policy officers to participate as lobbyists. Both are professionally experienced DN employees, and possess the qualifications needed

PO has presented the case for including NGOs in the standardisation process in both the European Parliament, in the Commission, and before Danish ministers. In Denmark, consultation briefs have been sent to the two Danish ministers of environment holding this post during the project period. The briefs acknowledge the funding limits, but also state the benefits and opportunities of NGO participation in standardisation. Other briefs have been produced on this issue for the Danish Commerce and Companies Agency.

DN has informed on the project in its internal magazine European Environmental News (see Appendix 6.1)

As a member of EEB, DN has forged an alliance working together on the issues.

Concerning the EU directive on packaging, DN monitored the process carefully. The directive was the first to be tested under the "New Approach" to environmental issues. Several standards will have to be produced under the directive. The process was launched before 2000. DN had followed the process prior to the project start, but was not in a position to work on the issue without funding. The process has been highly contradictory, as the mandates

⁶Lobbying is a central activity performed by many stakeholder organisations. Negative connotations of hidden agendas or even corruption may be associated with the concept of lobbyism. However, in this context, lobbying means taking advantage of the chances to present arguments, influence and advocate in favour of an organisation's interests in relevant forums and towards decision-makers, in order to ensure that all views and details of the organisation's interests are heard.

based on the essential requirements allowed a rather open interpretation. Stakeholder organisations from business. transport. national EPAs as well as European NGOs have all been defending their views. As for determining the best available technology and reducing waste and weight, businesses has been afraid of loosing their right to

goal.



design and brand new products. As a result, many standards place virtually no limits on the choice of first design and material, while environmental issues are treated as a secondary criterion. It is thus questionable if packaging material can be limited to environmentally friendly substances and if the growing amount of packaging waste can be reduced. DN has made notes and comments to the EU parliament, where a rather large group of parliamentarians support the reduction-of-waste

Several Danish parliamentarians favour low-waste solutions. DN has forcefully argued its case to the Commission during public consultations, and towards the Danish EPA. In general, the opponents have been powerful industry-related organisations. DN continues to monitor new standards issued under the directive. DN, EEB as well as other stakeholders are, however, generally convinced that they have been unable to influence the process. In 2002 DN argued for and found support at the Danish governement that "the essential demands" of the directive was revised The directive is almost at its final revison, and

The EU Directive on Packaging and Packaging Waste was the first directive to be produced under the New Approach, and is being tested for the inclusion of environmental aspects. One issue was whether design, size, double-packaging etc. should be regulated as essential requirements.

although DN presented its arguments as early as possible, their influence have been marginal.

The questionable result and critique of the packaging directive has called for a revision of the New Approach. The EU commission has set op a consultations scheme with several meetings over the past four years. Both DN and DS have been very active in these consultations, and DN also participated in an advisory group to the European Commission on the issues. A draft document of a revised New Approach has not yet been produced by the Commission, DN will continue to follow this process carefully, arguing for the highest degree of environmental concerns to be taken into account in the method. The focus for both the commission and the stakeholders is the mandating process and determination of essential requirements.

The EEE directive is the next directive to be tested under the New Approach. However, since the poor results of the packaging directive still give rise to criticism, both EEB and DN have advocated postponing the process until the revised New Approach is implemented. DN continues to monitor the process.

However, one issue has been very time-consuming from 2000 to 2003: the establishment of a European NGO Technical Committee for Standardisation. Three European organisations receive funding from the commission to establish and run standardisation offices. The European Consumers' Council has established ANEC, the European Organisation for Small and Medium-Sized Enterprises NORMAPME, and the European trade unions have set up TUTB. All are associate members of CEN (see Case 4), participating in selected committees. EEB made attempts to treat these three organisations equally in the standardisation area, but as EEB was left without funding, it had to withdraw in protest. In view of this situation, DN contacted the Danish minister of environment and a Danish Member of the European Parliament in order to persuade the EU Commission to fund EEB on a par with the three other organisations. The Danish media covered the story in several articles (see Appendix 6.1). This attempt was unsuccessful, but DN and the Danish minister put pressure on the commissioner. After several meetings and complications, a call for tender was made by the Commission. DN, EEB, and World Wildlife Fund Europe produced a proposal for a group of European NGOs (Birdlife International, BUND in Germany, DN, EEB, Greenpeace). The proposal won in competition against other proposals, and ECOS, the European Environmental Citizens Organisation for Standardisation, was created in January 2003. The organisation employs one person.

The member organisations of ECOS supply experts for both the Board of ECOS and for those selected standardisation committees in which ECOS chooses to engage. PO from DN has been very active in this process, and helped break down the barriers by producing notes, presentations at the European Parliament and in the Commission. The budget of ECOS is small, and DN and ECOS are lobbying for more funding.

Lately DN has joined in the workshops on the Integrated Products Policy, and produced briefs on the green book.

The lobbying strategy, applied by DN, has been extensively pursued by PO with much dedication and effect..

4 Democracy vs. Technocracy

4.1 Democracy

A vibrant democracy requires active interest groups who communicate their views and engage in the debates of society. Among these interest groups, the increasing numbers of influence-seeking NGOs have become rather effective. The general public has accepted that NGOs function as watchdogs, and as active players on the global political scene. The NGOs' legitimacy rests partly on this acceptance.

The UNECE's (United Nations Economic Council for Europe) Aarhus Convention from 1998 forms the general legal basis for the growing number of environmental NGOs taking part in the European environmental debate. The convention lays down the basic rules for citizens' involvement in environmental matters and enforcement of environmental law. It consist of three levels. The first provides for public access to environmental information, the second grants the public the right to participate in decision-making processes, and the third ensures the public's access to justice.

EU finally adopted the convention completely in November 2003, and adjusted the corresponding directives.

At the second level, NGOs are specifically invited to participate:

(4) Participation, including participation by associations, organisations and groups, in particular non-governmental organisations promoting environmental protection should accordingly be fostered, including inter alia by promoting environmental education of the public. [Directive 2003/35/EC, May 2003]

The invitation to participate is based on democratic reasons and it refers to both general participation and ...early and effective opportunities to participate in the preparation and modification or review of the plans or programmes required to be drawn up under the plans or provisions listed in Annex I (Article 2.2). The list includes most of the environmental directives under which standards are produced.

One of the central outcomes of the Johannesburg Summit in 2002 was the call for establishment of partnerships, and involvement of all actors. The Aarhus convention provides for active partnerships between governments, NGOs and other stakeholders. With the right of access to most environmental information and participation in the decision making process, NGOs are in a better position to influence the outcome of laws and programmes. Through consultations and invitations to workshops and committees, NGOs may add valuable information to the process.

In line with this convention, the Danish minister of environment has openly invited the NGO community to participate in the standardisation process. He has welcomed NGO involvement in the development of voluntary mechanisms such as standards, and within the Integrated Product Policies. He emphasised that NGOs could be important players, highlighting the "New Approach" with its mandating processes and standardisation framework.

4.2 A central barrier

The legal framework for participation is in place. However, so far public funding has not been offered, thus leaving one general obstacle

to be solved if NGOs are to get strongly involved. The doors are open, but there are only limited resources to enter:

WWF Europe has tried to go through the door. But due to poor results, this NGO withdrew again. The costs became significantly higher than the potential gains from participation. WWF participated from 1994 to 1999. In order to optimise resources, they decided to use their scarce funding otherwise, and only monitor the development in certain standardisation areas.

One example of funding is the German DIN Standardisation Environmental Protection Helpdesk (DIN/EPH) established in 1992. It is funded by the government and is guided by a steering committee comprising all interested parties, environmental authorities, industry, environmental and consumer NGOs, labour unions, and scientific institutes. The DIN/EPH may support a small number of NGOs financially, but is mainly a centre for information dissemination to both external partners and to the committees. In its newsletters, the DIN/EHD delivers information, e.g. to NGOs and other stakeholders, on specific initiatives.

As NGOs rely on their membership fees, donations and grants, the resources available limit their participation. If NGOs are to contribute their full potential to the democratic process, a funding scheme must be found to support their efforts.

Another way to diminish the problem of scarce resources is the establishment of alliances. Environmental NGOs could find partners among both consumers organisations, trade unions, and even among progressive industry associations. Many businesses have seen an opportunity in sustainable develop-

ment, and concrete partnership with NGOs is one among other ways for them to learn and share pro-environmental attitudes.

Associations of small and medium-sized enterprises are other possible partners. Several of these rely on sustainable production, and they would like to gain greater influence on standardisation. Their resources are also limited. Alliance partners could thus be found among all the stakeholders in standardisation.

So far, the democratic aspect of the actual standardisation products has been left to the agents on the markets where standards are to be used. This has left the standardisation forums with financially powerful interest group, appointed experts and technocrats. Despite these experts' supposed overall concern for the environment, they cannot be expected to give greater priority to environmental issues than to economic and technical aspects. However legitimate their interests may be, they have a different focus when attending meetings and spending resources on standardisation. NGOs and their alliance partners may counterbalance this situation and support authorities in working for more environmentally-friendly standards.

4.3 Legitimacy of NGOs

In the survey conducted for this report, an expert questioned the legitimacy of NGO participation in the standardisation process. This argument was not developed in detail. But according to other answers to the rest of the survey, the expert's scepticism springs partly from the difficulty of holding NGOs to account.

The expert has a point. In principle, any small group of citizens could establish an environmental NGO on, for instance, a single environ-

mental issue, but without a clear mission. Such an NGO could build its existence on the support and sympathy of the general public, but at the same time, it would not be accountable to anyone else than its own few members. Its actions would bring no consequences (except in terms of popularity).

Due to this question of legitimacy, greater demands for accountable NGO governance have been raised in recent years.

This is clearly expressed in a workshop paper on NGO accountability from "Global Compact" on April 3rd 2003: "..government, the private sector, academia, and the general public - call for assurance that NGOs are responding to the needs and expectations of their many stakeholders and fulfilling their varying missions and objectives". In the same paper, Jeffrey E. Garten, Dean of the Yale School of Management, argues that "NGOs have had too much of a free ride in identifying themselves with the public interest. They have acquired the high ground of public opinion without being subjected to the same public scrutiny given to corporations and governments...It is time that companies and governments demand more public examination of NGOs"

The criticism may be a little strong, but it indicates that all NGOs need to be well organised, and that their campaigns and actions should be constructive and open to evaluation. However, as many NGOs are proactive, setting the course of change, these demands for accountability should not restrain the NGOs' visions, but rather serve as a tool to improve their goals. Accountability should reinforce an NGO's long-term building of trust, and leave it equipped to argue transparently for its actions, campaigns and statements.

One could boil down the demands to be placed on NGOs to:

- I. Establish a formally organised and clear leadership set-up (open governance).
- 2. Produce a clear mission, guidelines and programme.
- 3. Perform (or perish).
- 4. Be transparent.
- 5. Be accountable to all stakeholders (externally to governments, donors, the public, other NGOs, grassroots, private sector, global institutions and organisations etc., internally to members, the board and senior staff of the NGO, as well as personally in terms of moral obligations and ethics).
- 6. Be open to evaluation and criticism.

These six points are not a rigid model of NGO legitimacy, but a mere checklist of issues of principles to be addressed by the organisations. Based on the above six points, suggested options for formal legitimacy set-ups are self-regulation, third party certification, and registration.

The Danish Society for Conservation of Nature comply with the above principles, both in this project and in general. DN is a legitimate partner in the process. But it is fair to raise the question whether DN is prepared to face the consequences of its participation.

DN has taken a clear view of the future, defined a mission, and adhered to the path of sustainability. The organisation recognises that changes must be carried out at all levels, from political decision-making to individual choices, and that changes must be global in scope, including contributions to concrete improvements. Consequent-ly, DN has widened its strategy by taking a constructive, critical stand, mainly arguing and taking action in favour of well-defined changes.

In this project, DN is certainly not taking a "free ride", but has decided to be responsible and work for specific solutions. DN has taken on the challenging task of engagement in the prolonged and often tiresome standardisation process. On the other hand, by being active at all levels, DN has proved to be responsible and proactive in its views on sustainability.

Participating in standardisation is only worth the high costs if DN finds concrete solutions to the problems. Moreover, the organisation must be prepared to account for its decisions and suggestions. It takes on responsibility for finding solutions in the complex realm of standardisation. In this respect, it has supplied its own environmental experts and become partners in the process, carrying the burdens that this brings. DN must also be prepared to take any resulting criticism, either now or in the future.

DN should expect its commitment to cause conflicts of interests. Participation in standardisation may oblige the organisation to play along with a far from optimal consensus outcome. DN will find that it must bend its arguments to industrial market interest. DN's participation in the case of the BREF on Intensive Livestock Farming exemplifies a dilemma of this sort. The case of the ISO 14000, where DN decided to withdraw from the process, is another example of DN only being able to observe from the sideline. In these cases, DN was unable to meet its goal of leaving footprints. Shortcomings can be explained, but based on the relation between successes and failures, DN must now decide if it is cost-effective to participate.

At the same time, DN must be able to defend its decisions in public and to preserve its credibility. DN must consider if the consensus strategy is in line with its mission and objectives, and on which terms it wants to evaluate itself.

5 Conclusions and recommendations

5.1 Detailed conclusions

The evaluation clearly finds that DN has, to a considerable degree, achieved the general objectives of the pilot project, which motivated the support of the Cleaner Products programme.

As an environmental NGO, DS has managed to strengthen the environmental political dimension and to highlight environmental potentials. Together with the NGO umbrella organisation EEB (European Environmental Bureau), DN has persistently presented its case for incorporating environmental aspects into international standardisation. The organisation has been able to counterbalance other stakeholder views and to secure consistent pressure on other experts to take account of external environmental arguments in the process.

Wherever DN participated in the committees, active involvement comments or even footprints and traces of DN's qualified inputs can be identified. However, it cannot be determined whether the other experts even in the absence of DN representation would have discussed the issues raised by DN at some point. Many of the issues were known to these experts, and it is unclear whether they would have argued in favour of taking them into account. It is, however, evident that DN's participation has served as a valuable catalyst shedding new light on the issues. DN's competent participants contributed a wider perspective to the committees, and their involvement was strongly welcomed by most other experts. An important observation is that DN was

most successful when attending all meetings and actively producing notes, comments, and presentations. Unsurprisingly, the conclusion is that DN's degree of influence hinges on the extent of its efforts. In some committees, DN could possibly have been more active in introducing its arguments.

However, a few barriers kept DN from gaining maximum influence on the processes. A period of three years is insufficient for an organisation to become familiar with the standardisation process. This is especially the case of technical standardisation, where detailed knowledge of work items is required to add new information. In the case of the BREF ILF and ISO 14000 revision, the work was already well underway when DN was introduced to the committees. If the DN is to be more successful in achieving balanced views within these committees, a longer period of participation is needed.

In relation to timing, another important conclusion must be drawn. It is crucial that the NGO (and other environmental stakeholders) join in the process as early as possible in order to table their arguments in the initial stages. Late introductions do not allow alternative solutions, suggestions and general contributions to be incorporated into the process. In relation to the EU's "New Approach", NGOs should be consulted already when the working group's mandate is drawn up.

Another overall finding is that the project funding was essential to pursue the project objectives. Intensive political lobbying for the inclusion of NGOs in standardisation would not have been possible without the grant. DN was

able to support the international NGO community, and to take the lead when important decisions were to be taken. Both in the EU Commission, CEN and in TC 207, the debate on whether to grant NGOs associate status peaked during the project period. DN was able to supply arguments, thus producing a more balanced discussion. DN's lobbying achieved the objective of supporting the political dimension as well as the organisational and structural set-ups for integrating environmental aspects into standardisation.

Political lobbying and consultations are at the heart of DN's work in Denmark. On the international scene, DN has proved to be an efficient actor. However, the evaluator recommends that DN's international legitimacy be based upon the context of Danish policy-making.

DN's and EEB's joint effort to establish and find the ECOS (European Environmental Citizens Organisation for Standardisation) within the European Commission has clearly met an objective of the project. Through intense lobbying and presentation of their case to the then Danish Minister of Environment and a Danish MEP, it was possible to convince the EU commissioner of the need for establishing an NGO technical bureau. Lobbying and travelling activities were only made possible by external funding of the project.

The engagement of DN and the establishment of ECOS represent a democratic improvement of the process, opening standardisation forums to greater public scrutiny. DN has joined as executive committee member of ECOS. However, one conclusion is that ECOS's work needs to be strongly supported by its member organisations, as ECOS itself has only

one employee, the secretary-general. Auspiciously, the survey on this issue points to a growing international agreement and understanding among NGOs concerning the importance of NGO participation in standardisation. Strong national support to ECOS is thus recommended

The project funding has effectively enabled DN to engage in the international standardisation process. In conclusion, strong involvement, as in this project, is only viable through external funding. Consequently, sustained participation on such an intensive and wide-ranging scale hinges on either continued external funding or a greater allocation from DN's existing funds.

The strategies in pursuit of the objectives, as set out in the application, were adhered to. In line with the above conclusions, the point-by-point strategy was the least successful, while in terms of exerting influence, the lobbying strategy was the most successful. The strategies of criticism and self-management were mainly pursued in the political bodies of the committees to some effect. One point is that all strategies may be effective, but must be selected according to the purpose and based on the competencies of the NGO concerned.

As an example, the point-by-point strategy is effective when a proposed standard, without any environmental aspects taken into account, is to be introduced or revised. Particularly contentious standards could be singled out for NGO participation. Balanced NGO participation ensures the inclusion of environmental aspects. The setting of priorities, by selecting standards and work items, should be the first task in order to secure resource optimisation.

The strategy of criticism is appropriate when aimed at producing constructive criticism capa-

ble of improving the process. Since the consensus principle prevails in the committees, other experts in the organisations will be reluctant to adopt or respond to unsubstantiated criticism. Elements of criticism also form part of the other strategies. The self-management strategy is effective e.g. when manuals, guidebooks, databases and institutions like the CEN EHD are part and parcel of the process. NGOs could deliver environmental arguments and examples to databases. As a member of the CEN EHD network of experts, NGOs may supply valuable information to the process

5.2 Recommendations

5.2.1 Increased Participation by Environmental NGOs

The general findings of the project provide several arguments for increased NGO participation in the standardisation processes.

Firstly, from the perspective of democracy, the NGO community may counterbalance the dominance of business and technical stake-holder representation in standardisation.

Secondly, it makes it more likely that the public's general views complement those of the experts in the process. New and overlooked environmental arguments and aspects might be added or get more consideration (the cases of genetically-modified organisms or electromagnetic radiation from third-generation mobile antennas are examples of standardisation areas with legitimate discrepancies of interests between the public and the experts).

Thirdly, NGO participation boosts transparency and open communication with the public on these issues. The NGOs' involvement is based on their policies, general public support for these policies, and the NGOs' members sup-

porting the policies. However, it also obliges the NGOs to find competent participants, to communicate their views, and to work publicly and transparently. Information channels should be both internal and external.

Fourthly, the function of public "watchdog" is best exercised when the NGOs take part in the process.

A final recommendation that goes beyond the actual participation of NGOs in standardisation, but at the same time also would a be strong support for the experts, NGOs and other participants efforts to make standards green, is the development of a general directive in the EU. The general directive should recommend and make essential demands for the inclusion of Environmental aspects in all standards. With a general directive similar to directives demanding safety standards, the green NGOs and other experts would have a legal tool to spur and support their engagement, and consequently the results.

5.2.2 A proposal

If increased NGO involvement in the process is to be supported, it must be both cost-effective, as funding is scarce, and practically operational, as many stakeholders are involved. As evaluator of the project, I propose the set-up outlined here below.

The NSB has an important role to play. As the single most knowledgeable organisation of the national and international processes, this body may play a leading role in increasing the involvement of all stakeholders.

First and foremost, NSBs serve as professional secretaries to national committees and working groups. They supply information on any initiative, as well as suggestions for new work items or for the revision of old standards. At present, the Danish NSB, together with the established mirror committees of national experts, continuously assess the issues, deciding if new working groups should be set up, if a work item should be adopted or rejected. Decisions are thus taken by the NSB and existing expert members of the committees.

Secondly, the NSB's general obligation is to inform and possibly select new national stake-holders for involvement in new proposed subjects or work items. This latter obligation calls for public consultation among interested parties.

The evaluator recommends that this second obligation be developed and formalised in relation to the national NGO community.

The evaluator suggests that a formalised NGO clearing house be established. This entity should not serve as a committee or working group under the NSB, but merely function as a meeting point of information and consultation. The purpose should be to disseminate information and serve as a gateway, both to channel arguments and to collect new information for the NGOs.

Based on the clearing-house information, decisions on possible participation in the various national and international standardisation areas could be taken. If the clearing-house information is co-ordinated with, for instance, ECOS and CEN helpdesk activities, the NGO community could undertake a wider and even more international dissemination concerning the incorporation of environmental aspects

Alongside the NSB, the national EPA may provide overall information on any proposed work items, new directives or legislation affect-

ing new standards or mandates to be written. The process would only strengthen the consultation and dialogue between the NGO community and the authorities.

In principle, for democratic reasons, membership of the clearing house should be open to all national NGOs in the field of sustainable development. However, to ensure high quality and competence in standardisation, a capacity criterion for membership is an option. Although the clearing house would mainly be for information purposes, a set of criteria could prevent NGOs with little capacity from wasting their resources on the complicated and often lengthy standardisation processes. And as this evaluation has revealed, NGO competency is a prerequisite for counterbalancing the influence of the committees. These criteria need to be developed, but could encompass few and simple demands for professional qualifications, whereas the number of NGO members need not be a criterion.

The clearinghouse could also be open to trade unions and, for instance, associations of SMEs (small and medium-sized enterprises). These often share some NGO characteristics, such as limited resources that must be carefully managed. These organisations might also share some interests regarding standardisation, enabling the building of NGO and possible cross-sector alliances within the forums of the clearinghouse. At the same time, alliances will serve to optimise resources.

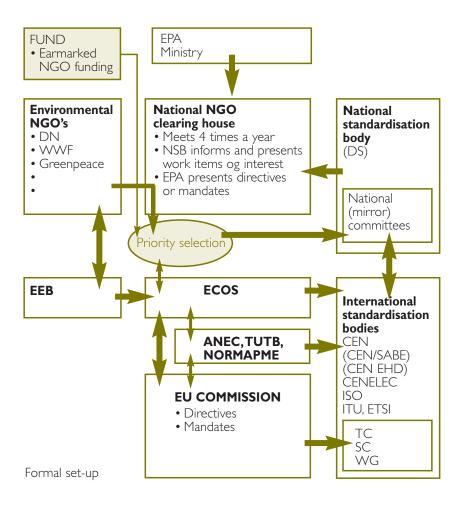
Participation could resort to a variety of funding solutions. One suggestion is an annual public budget allocated to this purpose, i.e. a fund to which would-be participants should apply, describing their planned activities. If activities are to be partially or completely paid through this fund, allocations could be based on the

interests formulated by each NGO, as well as on each activity's relevance, importance and cost. The fund could be administered either by the EPA or DS (the Danish NSB). However administration costs should be kept at a minimum.

sored German DIN/Environmental Protection Helpdesk, public financing is a prerequisite for wider and more qualified environmental inputs to the process.

Other funding options might be explored. However, as shown by the government-spon-

The chart below illustrates an organisational set-up:



6 Appendix

6.I Appendix I. List of Articles

Articles I to 7 can be found online at: www.dn.dk/ekspertfora/artikler

- I. 'Det internationale standardiseringsarbejde og Miljøet', Pia Olsen, DN, Europæisk Miljønyt nr 8. marts 2000
- 'DN vil finde nye veje til at inddrage miljø i standarder' MiljøDanmark, Renere produkter, 3/2000
- 3. 'Bæredygtig Metode, tak', Pia Olsen and Michael Minter, DN, Europæisk Miljønyt nr 10, Juni 2000
- 4. 'European Environmental Technical Bureau's eventuelle fremtid', Pia Olsen, DN, Europæisk Miljønyt nr 11. September 2000
- 5. 'Kampen for et Teknisk Bureau', Pia Olsen, DN, Europæisk Miljønyt nr 12. Oktober 2000
- Ingen penge til et teknisk bureau i denne omgang', Pia Olsen, DN, Europæisk Miljønyt nr 13. November 2000
- 7. 'Free Trade Standards and Environmental Protection', Pia Olsen, DN, 2000
- 8. 'Sustainable Products and Free Trade', Thomas Færgeman(DN) and Christian Frankel (CRPM, Copenhagen Business School) 2000.

Newspaper articles:

- I. 'Miljøorganisationer boykotter EU', Information .15.05.2000
- 2. 'Miljøorganisationer boykotter EU', Aktuelt Web (http://www.aktuelt.dk) 15.05.2000
- 'Miljøorganisationer boykotter EU', Danmarks Radio online(http://www.dr.dk) 15.05.2000
- 'Dansk Pres for støtte til miljøorganisationer' Ritzau online, (http://www.ritzau.dk), 15.05.2000
- 5. 'Gode Råd er Dyre', Aktuelt, 16.05.2000
- 6. 'Grøn boykot af EU standarder' Politiken, 16.05.2000
- 7. 'EU beskyldes for at svigte sit miljøansvar' Information, 16.05.2000
- 8. 'Pres for støtte til miljøet', Berlingske Tidende, 16.05.2000
- 9. 'EU-boykot virker', Information, 16.05.2000

6.2 Appendix 2. Selected references and links to further information:

- I: CEN, CEN-SABE and CEN Environmental Helpdesk, [Online] http://www.cenorm.be; .../cenorm/workarea/advisory+bodies, and .../sectors/ehd.htm
- 2: CENELEC,[Online] http://www.cenelec.org
- 3: Danish Environmental Protection Agency: [Online] www.mst.dk
- 4: Danish Ministry of the Environment: [Online] www.mim.dk

- 5: Danish Standards Association [Online] www.ds.dk
- 6: DIN Environmental Protection Helpdesk. [Online] http://www.din.de
- 7: European Integrated Pollution Prevention and Control Bureau [Online] http://eippcb.irc.es
- 8: European Union, Environmental Directorate [Online] http://europa.eu.int/comm/environment

9: European Union, "Convention on Access to Information, Public Participation in

Decision-Making and Access to Justice in Environmental Matters (The Aarhus Convention)", EU Parliament and Council Regulation: No. 1049/2001, and European Union, "Directive 2003/35/EC of the European Parliament and of the Council, of 26 may 2003, providing for public participation in respect of the drawing up of certain plans and projects relating to the environment and amending with regard to public participation and access to justice Council directives 85/337/EEC and 96/61/EC. [Online]" http://europa.eu.int/comm/environment/ aarhus/index.htm

- European Union "The Integration of Environmental Aspects into European standardisation- Public Consultation . 25 July 2003-15 September 2003", ENTR.G.2/ENVG.2 European Commission Environment Directorate-General, 2 October 2003
- II: ISO, [Online] http://www.iso.org
- 12: ISO, Technical Committee 207, "ISO/TC 207 N626(E) Final Resolutions" 6th July, 2003, [Online] http://www.tc207.org/, September 2003
- 13: ISO TC 207 "TC 207 Scope", [Online] http://www.tc207.org/aboutTC207., September 2003
- 14: "Managing a Better Environment: Opportunities and Obstacles for ISO 14001 in Public Policy and Commerce", Pacific Institute, March 2002"
- 15: Global Compact "Who Guards the Guardians" Workshop findings of Global Compact/Sustainability workshop, 3rd April 2003; and input to the report "The 21st Century NGO", Sustainability, July 2003. [Online] http://www.sustainability.com
- I 6: "Evaluering af DNs arbejde med Europæisk og International natur og Miljøpolitik". Tholstrup Consult, October 2002

6.3 List of abbreviations (organisations)

ANEC European Association for the Co-ordination of Consumers representation in

Standardisation. Umbrella organisation for European Consumers organisations

CEN European Committee for Standardisation.

CEN/SABE Strategic Advisory Body on the Environment in CEN

CEN/EHD Environmental Help Desk in CEN

CENELEC European Committee for Electrotechnical Standardisation

DIN/EPH (Deutsches Institut für Normung e.V./ Kordinierungsstelle Umweltschutz)

German Standards Association/Environmental Protection Helpdesk

DN Danish Society for the Conservation of Nature

DS Danish Standards Association

ECOS European Environmental Citizens Organisation for Standardisation. An umbrella

NGO technical bureau.

EEB European Environmental Bureau. Umbrella organisation for European

Environmental NGOs

EIPPCB European Integrated Pollution Prevention and Control Bureau. Producing BREFs:

Best Available Reference Notes

ETSI European Telecommunications Standards Institute
IEC International Electrotechnical Commission
ISO International Organisation for Standardisation

ITU International Telecommunications Union (Standardisation Body)

NSB national standardisation body

NORMAPME The European Standardisation Bureau for Small and Medium Sized Enterprises.

TUTB European Trade Unions Technical Bureau on Standardisation.

UN United Nations

UNECE United Nations Economic Commission for Europe

WTO World Trade Organisation,

