

## **Advancements in environmental management – active development of international standards**

### ***Report of the international conference on ISO TC 207, Berlin – by René Wasmer***

From 1 – 6 June 2019, the conference for ISO TC 207 for Environmental Management was held in Berlin presided over by Ms. Sheila Leggett from Calgary, Canada. With over 200 participants, the event included numerous topic-specific expert meetings on developing standards as well as workshops for sharing expertise.

Founded in 1993, TC 207 is an international umbrella organisation for environmental issues which works towards standardisation in the area of environmental management with its experts from around the world. In addition to it TC 207 also produces supporting tools and undertakes communication.

The Swiss Committee SNV NK 174 for Environment and Sustainability actively influences the development of these standards and their application in Switzerland. At the Berlin conference this year, the NK 174 delegation was made up of the relevant experts René Wasmer, Kurt Buxmann and Franz Knecht.

The focus of TC 207 is on the worldwide application and impact of the established standards. This is to support the UNO SDGs for 2030 and to put a greater emphasis on developing the standards on electronic meeting platforms in the future.

### **The current programme of ISO TC 207**

The following themes are currently prioritised in the agenda of TC 207's working programme:

- Fighting climate change and reducing environmental pollution, e.g. clean and accessible water supplies, resource efficiency, biodiversity, sustainable consumption.
- Introducing environmental management in every type of organisation, public or private
- Using labels to provide users and consumers with relevant and reliable decision-making aids
- Applying life cycle thinking in all areas of environmental protection with the aim of efficiency and a focus on the necessary development required to achieve a “circular economy” or a recycling-oriented economy/society
- Implementing the measurement and evaluation of environmental efforts and aiming towards making an IMPACT
- Integrating financial aspects, financial actors and economic considerations into environmental management more effectively, in particular by
  - making methods available for economic and monetary evaluation of environmental aspects (impact)
  - developing standards to create verifiable green obligations (green bonds), green credits
  - evaluating the risk of climate change for the financial economy using supporting tools and assessing the impact of the active influence of investors on asset manager firms to achieve the goals of the Paris Climate Change Summit.
- Implementing audits, evaluation models, validating and verifying in organisations for the conformity proof and the management of environmental related risks, opportunities, performance progress and compliance (known as assurance in external communication)
- Making use of new technologies and using the possibilities of digitalisation to further develop the environmental standards
- Intensifying collaboration to achieve efficiency – with interested parties and other technical committees worldwide.

## **Structure and networking for ISO TC 207**

TC 207's structure is formed from six sub-committees and numerous working, task, advisory and study groups which develop standards and are involved in information events and workshops with experts and interested parties (industry, industry organisations, environmental protection associations, economy representatives, authorities, etc.). TC 207 does not just strive towards relevance of its standards, but also towards technical up to date, high quality and worldwide accepted standards in order to maximise the benefits for users and the environment on an ongoing basis.

ISO TC 207 has an impressive global network. Alongside experts from all over the world who create the standards, almost all relevant, interested parties are actively connected with TC207 and its developments via a liaison membership.

## **What the environmental standards of ISO TC 207 achieve**

TC 207 currently has over 41 published ISO standards. There are also 29 projects which either aim towards revising current standards or producing new ones. TC 207 standards are principally implemented voluntarily and applied as part of self-regulation. They support users in areas such as environmental management, in the evaluation and management of environmental impacts, for communication measures, for demonstrating conformity & compliance, in competition and in many other regard if the focus is on developing and implementing competence, aiming towards greater impact and progress or the use of recognised forms of proof of conformity.

There are an increasing number of recommendations of and references to TC 207 standards, e.g. as best practice recommendations in legal and official documents or in the area of voluntary duties and contractual agreements within trade and industry or in other privately established industry-specific topics. ISO standards tailored to the financial market are being developed for due diligence as well as for the creation of green bonds, obligations and credits.

ISO standards can make an important contribution to the economy and society in promoting sustainable and responsible action and behaviour, successful collaboration and beneficial innovations.

You can find details on TC 207 and the projects at <https://www.iso.org/committee/54808.html>

## **Relevance and impact of the ISO TC 207 standards**

There are a number of developments worthy of mention from the last TC 207 conference which promoted advancements in environmental management and the attainment of improvement on environmental matters and sustainable action in economy. The relevant drivers and topics from the Berlin conference are:

- Extension of TC 207's contract

*From now on, the contract should be adapted to so that in the future, environmental standards also include social and financial aspects relating to environmental management and environmental impacts.*

*Note:*

*In the last four years, this adaption has already been pragmatically carried out by the new projects: ISO 14008:2018 Monetary valuation of environmental impacts and related environmental aspects*

*ISO 14007:2019 Determining environmental costs and benefits*

*ISO 14030 (completion 2019-20) Green debt instruments – Green bonds, green loans, taxonomy, verification*

*ISO 14097 (2020) Greenhouse gas management and related activities – investments, financing and climate change*

- Validation and verification (assurance of reports with environmental information or environmental claims)  
*The new standard ISO 14016:2019 with guidelines for validation and verification of environment reports or the environmental parts of sustainability reports.*  
*The new standard ISO 14065:2020 with verifiable requirements for validation and verification of environmental claims (e.g. statements).*
- Verification of water information  
*This new standard project ISO 14017 defines the assurance process for water information in the style of ISO 14065, including validations and verifications of information according to the necessary confidence levels.*
- Environment labels and environment achievement declarations of new aspects  
*Integration of block chain and new technologies. An internal review of the standard portfolio for future relevance will be carried out by the committee in reference to footprint information and electronic labels.*
- Due diligence focus on evaluating locations/companies  
*The upcoming revision of ISO 14015 with a stronger content focus on capital transactions of the current due diligence standard for evaluating locations.*
- Topic-specific application of ISO 14001  
*The new standard ISO 14002 – general and specific guidance on the theme of water management.*
- Future challenges with reference to ISO 14001  
*Identifying future themes and determining their relevance for environmental management which can be implemented for the next revision of ISO 14001 (not starting before 2021).*
- Revising the high-level structure for ISO management system standards (MSSs)  
*TC 207's influence on revision which should be used by 2021 as a revised ISO Directive Annex L for all TCs with MSS. There are currently 45 MSSs based on the high-level structure.*
- Circular economy and sustainable finance  
*Both of these recently established new standards, TC 323 Circular Economy and TC 322 Sustainable Finance, tackle issues which are also directly or indirectly relevant to TC 207 Environmental Management. All three TCs are essentially about environmental impacts and socioeconomic consequences.*  
*Consequently, TC 207 has just created the mechanism for strategic collaboration and the development of relevant standards. Both new subject areas will be developed in Switzerland in the SNV Committee 174 Environment and Sustainability by establishing three national sub-committees for environmental management, developing the circular economy and the sustainability of financial markets.*  
  
*There is a clearly increasing awareness of circular economy issues in Switzerland. This can be seen by e.g. tackled topics and available recommendations from economic and political actors as well as private organisations over the past years and recently by the movement CIRCULAR ECONOMY SWITZERLAND especially by its underlying projects and initiatives including the CE2 conference. See <https://www.ce2.ch/news>. Swiss companies and particularly small and medium-sized companies have undoubtedly been making significant progress in environmental management and in the past, they have aimed for impressive advancements towards better environmental efforts.*  
  
*The basic concepts of a circular economy would be to also offer meaningful and additional strategic potential with regards to the next significant steps in the direction of sustainable economies, innovation and new business possibilities tailored to changing contexts. It has therefore received a lot of attention.*
- Stronger integration of financial actors within environmental protection matters  
*The necessity of involving financial actors to increase the impact of the standards on the UNO sustainable development goals (SDGs) for 2030. Currently, 14 of the total 17 SDGs are supported by ISO standards.*
- Standards for green finance  
*A new ISO 14100 standard is being prepared with guidance for lenders as well as those seeking credit. This tackles how and according to which criteria environmental aspects and efforts should be presented when green credit is offered or requested.*

- New standards and initiatives in the area of climate change  
*Supporting tools and standards for managing GHG and the effects of climate change and for evaluating the risks of climate change for the financial economy.*

### What's next?

The next TC 207 conference is planned for October/November 2020.

The subject will also be discussed in Switzerland in the SNV NK 174 Mirror Committee Environment and Sustainability and in collaboration with interested parties.

### Links and feedback:

<http://www.charter4.com/iso-14001-certification/>

<https://www.iso.org/committee/54808.html>

Feedback: [rene.wasmer@sqz.ch](mailto:rene.wasmer@sqz.ch)

**René Wasmer,**  
SQS, Deputy CEO  
Chairman SNV NK 174 Environment and Sustainability



The Swiss SNV NK 174 Committee accomplishes its mirror roles for the international committees ISO TC 207 Environmental Management, ISO TC 322 Sustainable Finance and ISO TC 323 Circular Economy as well as CEN-CLC/JTC 10 Material Efficiency.

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## Supplementary information on the developments in the individual committees

### Environmental management system, environmental auditing, valuation – committees SC1, SC2, SC3

Noteworthy developments include:

#### Future challenges with reference to ISO 14001

- *List of issues started for future themes through SC1 FCSG Future Challenges study group*
- *Relevant issues and aspects identified to be taken up in the future revision of ISO 14001*
- *Interim report on TC207 meetings expected in 2020*

#### Revising the high-level structure for ISO management system standards (MSSs)

- *TC 207's influence on revision which should be used by 2021 as a revised ISO Directive Annex L for all TCs with MSS.*
- *There are currently 45 MSS' based on the high-level structure.*
- *The issue is currently the manner in which the risk-based approach is used in each MSS. The aim of supporting each MSS (understanding and dealing with risks and opportunities) is also suitable.*
- *Various other improvements of the core-text and definitions are aimed to be introduced, normally not changing current requirements. The specification of the HLS-Revision gives boundary conditions for a limited revision, but leaves room to touch new topics under specific conditions such as add-value and additional improvement.*
- *Planned completion of the revised HLS in the form of an ISO Directive Annex L for May 2021.*

### The new ISO 14002 standard

- *ISO 14002-1 expected to be published in 2019.*
- *ISO 14002-1 and -2 tackle the topic-specific implementation of an EMS 14001 on the case of water management. There will be a set of connected standards based on a generic part of ISO 14002-1 which can form the generic basis for all subject areas that may follow. Based on this, ISO 14002-2 currently under development is an initial specific project on water management.*
- *Project ISO 14002-2 started in 2019.*
- *ISO 14002 standards provide guidance on topic relevance and practices*

### Standard ISO 14007:2018 Environmental Management – determining costs and benefits

- *To be published at the end of 2019*
- *Develops the guidelines to define the complete socioeconomic impact of an organisation on the environment. In this context internalised and externalised monetary and non-monetary costs and benefits are determined and can be demonstrated quantitatively as well as qualitatively. The basis is the relevant environmental aspects identified by an EMS as well as the environmental impacts e.g. of a company.*
- *Such determination is relevant for the completion of internal decision making principles as well as external communication, e.g. in the context of benefit analysis of ecosystems for the complete overview of impacts regarding relevant SDGs or even as part of Mergers & Acquisitions.*
- *For purely monetary definitions, the sister standards of ISO 14008 were developed which have been in effect since 2018.*

### Standard ISO 14008:2018 Monetary valuation of environmental impacts

- *To be published at the end of 2018*
- *Tackles the guidelines on monetary valuation of one or more environmental impacts (or effects) on the basis of recognised types of economic calculation beyond market prices, fees or fines (e.g. health costs or life expectancy reduction).*
- *Relevant in relation to internal full-cost calculation outside of usual accounting, e.g. for investment decisions by company top management, for alternative technologies or for external communication purposes with diverse stakeholders.*
- *ISO 14008 is the monetary part of the sister standards ISO 14007.*

### Standard ISO 14016:2019 for validation and verification

- *To be published in 2019*
- *Tackles the validation and verification of environment and sustainability reports (environmental part)*
- *Relevant in relation to the requirements and expectations of organisations in light of external communication and disclosure of non-financial information*
- *Also called assurance of environment and sustainability reports*

### Revision of ISO 14015

- *Project approved*
- *The current standard "Environment valuation of sites and organisations" will be revised*
- *It analyses dependence on needs and expectations of "due diligence exercisers"*
- *The relevance of the standards should be increased so the more due diligence aspects and definitions for capital transactions (Mergers & Acquisitions, company sales, IPO etc.) can be made.*

### A new standard project for green finance – ISO 14100

#### *ISO 14100 Guidance on environmental criteria for projects, assets and activities seeking green finance*

- *Editing the project is assigned to TC 207 WG 11*
- *ISO 14100 gives guidance to loaners and those seeking credit on how and according to which criteria environmental aspects and efforts should be presented when green credit is offered or requested.*
- *In many countries, it is already practice for environmental subsidies to be available from banks. A trend is also becoming apparent that loaners are increasingly being required by their sponsors to allocate credit to projects with noticeably positive environmental impacts.*
- *ISO 14100 is aimed at the real economy and describes the processes of how specific projects, capital goods or general activities are to be presented by way of environmental criteria.*
- *In comparison to standard 14030, there will intentionally be no taxonomy suggested. This will be defined differently in each geographical region, if it is even available.*

## **Environmental labelling and environmental efforts assessment – committees SC 3, SC 4 and SC 5**

Noteworthy developments include:

SC3 environmental labelling is submitting its standard product portfolio with new leadership of a verification and realignment

- *SC3 is under new leadership – Grame Drake, Australia*
- *The restructuring of the standard product portfolio affects the series ISO 14020 on environmental labelling. The focus is on user-friendliness and the classification of relevant topics. An ad hoc group determines the other practices.*
- *Example 1: In place of the standards ISO 14021ff, a new, probably three-part standard, possibly ISO 14028, will be produced in which the requirements of the different forms of product related environmental communication will be compiled. In a further, possibly three-part standard, expected to be ISO 14029, the verifications processes should then be dealt with.*
- *Example 2: Expected revision of ISO 14020 in which, alongside determining principles, terms and definitions, the different types of environmental communication about products should be defined in its entirety.*

## **Sustainable bank lending – standard series ISO 14030-x:2020 Green debt instruments**

Part 1 Green Bonds / Part 2 Green Loans / Part 3 Taxonomy / Part 4 Verification

- *Editing this project is assigned to SC 4*
- *Parts 1, 3 and 4 are expected to be published in 2020, part 2 in 2021.*
- *Tackles the guidelines for structuring obligations (bonds) or credits (loans) defined and verifiable as 'green', that means with a specific environmental impact such as climate protection measures through targeted financing. Central elements include the application and orientation of the 'green' taxonomy or definitions of terms in part 3 oriented around current taxonomies (climate bond initiatives, EU taxonomy in development). Verifying the use of resources will be given specific attention but it is also about the credibility of both loaners and those seeking credit.*
- *This new standard is designed for certification but can also be used as the first international standard for the definition of sustainable bank lending. The initiative for the standard comes from international banks and insurers who have already placed many green bonds of various influence on the capital markets, but the existence of a uniform and globally applicable standard is considered necessary in order to deal with the demand.*
- *The standard puts forward the first project of TC 207 to directly address the financial markets and the rapidly growing needs within financing (see monetary part of the sister standards ISO 14007).*

## **New standard for ecological assessment ISO/NP TS 14074**

- *This new project has been assigned to SC5 Life Cycle Assessment.*
- *Specification ISO/NP TS 14074 "Environmental management – life cycle assessment – Principles, requirements and guidelines for normalisation, weighting and interpretation"*
- *Different types of measurements within ecological assessments are developed as well as the distance-to-target process, which is based on the Swiss environmental impact points method. Rules regarding weighting are also defined following the panel process.*
- *Project launched in 2019*

## **Life cycle valuation and GHG management – committee SC 7**

Noteworthy developments include:

Focus of SC7 on greenhouse gas management and related activities

- *SC7 develops standards to manage GHG emissions and to adapt to the effects of climate change (climate change adaptation) with the aim of supporting the goals of sustainability. Relevant standard initiatives are prepared by two Task Groups.*
- *An initiative on the theme of "Climate neutrality" was postponed because, for the offsetting of climate benefits realised elsewhere, a consensus could not be reached for products, among other items.*

The following projects for the standards are currently under way for SC7 (for details, see

<https://www.iso.org/committee/54808.html>)

- *ISO/CD 14065 - Greenhouse gases - Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition*
- *ISO/NP TR 14069 Greenhouse gases - Quantification and reporting of greenhouse gas emissions for organizations -- Guidance for the application of ISO 14064-1*

- *ISO/AWI 14082 - Radiative Forcing Management-- Guidance for the quantification and reporting of radiative forcing-based climate footprints and mitigation efforts*
- *ISO/CD 14091 - Adaptation to climate change -- Vulnerability, impacts and risk assessment*
- *ISO/AWI TS 14092 - GHG Management & related activities: requirement & guidance of adaptation planning for organizations including local governments and communities*
- *ISO/AWI 14097 - Framework and principles for assessing and reporting investments and financing activities related to climate change*
- *ISO/NP 19694-1 Stationary source emissions -- Determination of greenhouse gas (GHG) emissions in energy-intensive industries -- Part 1: General aspects*

**New standard ISO/AWI 14097 - Framework and principles for assessing and reporting investments and financing activities related to climate change**

- *Editing this project is assigned to SC 7*
- *Publication predicted for 2020*
- *Develops the guidelines on the valuation and presentation of climate change risks to financiers as well as the determination and reporting of measures to allow influence by beneficiaries of finance resources. As such the contribution of an investor or loaner to achieve the goals defined at the Paris Climate Change Summit – mainly goal 2°, known today as goal 1.5° – should be measurable and documentable. The standard is therefore about active measures focussing on impact. It is about real economy and not investment behaviour.*
- *Relevant in relation to the recommendations of the TF on Climate-related Financial Disclosures of the European Commission (TCFD) or the Technical Expert Group on sustainable finance of the European Commission TEG) on transparency of the financial economy. Another benefit is the existence of reporting obligations for listed companies or organisations of a certain size in an increasing number of countries.*
- *ISO/AWI 14097 is linked to other standards of SC 7.*