



Closing the loop

Integrating circular economy into legislation and standards regarding PPE?

Brussels, 24 October 2019

- > 20 million SMEs
- 99.8% of all businesses
- 93 million people employed
- 67% of all jobs
- 57% of the gross value added
- More than 1500 EU standards delivered every year

What does SBS do?



21 Members

35 EU & EFTA countries
12 million SMEs

Economic importance of SMEs

Establishment of



Standardisation activities increasing/
Underrepresentation of SMEs in
standardisation

Legislative Framework (Annex III
organisation under Regulation
1025/2012)

What does SBS do?



Awareness-raising & motivate SMEs to become involved in the standardisation process

Represent and support SMEs in standardisation

INTERNATIONAL LEVEL

Engage with stakeholders involved at international level

EUROPEAN LEVEL

Annual Event, Trainings ,
Engage with the EU institutions

NATIONAL LEVEL

Capacity-building and train-the-trainer programme, national seminars, engage with NSOs

TECHNICAL



60 experts in > 200 TCs/WGs approx. 20 sectors

Participation in TCs, WGs to ensure SME-compatible standards

Member of EC committees

POLITICAL



Member of the governing bodies of the ESOs

Observer in the EC Committee of Standards

Member of the Steering Committee of the Joint Initiative on Standardisation

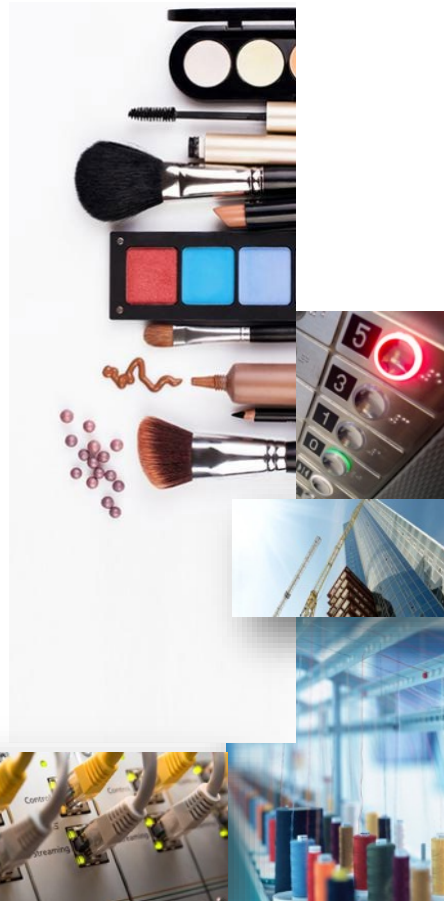
Some of the sectors covered by SBS



SBS Sectoral approach: 4 sectors



- Construction
- Cosmetics
- Doors and Windows
- Electrical Installations
- Ergonomics
- Furniture
- ICT
- Insulation material
- Lifts
- Machinery
- Management
- Occupational Health and Safety
- Pyrotechnic
- Road Vehicles
- Textiles and footwear
- Tourism
- Transport systems and navigation
- Welding
- Wood



- Evaluate the implementation of relevant legislation and standards
- Engage with SMEs and participate in European technical groups
- Elaboration and dissemination of information
- SBS Forum once a year

The protective clothing market – potential for a more sustainable business model?

The PPE clothing market

- Global PPE market 2018 estimated to be around 46,7 billion US Dollar (source IMARC Group)
- PPE clothing is estimated to account for 20-25% of this market.
- Key manufacturers of PPE clothing are multinationals.
- But: Data only looking from manufacturing side – not including services for PPE, such as laundering.
- Customers can decide between buying and leasing/service models of protective clothing.

Main applications of PPE clothing

- Thermal
- Mechanical
- Chemical
- Radiation

Main customer sectors of PPE clothing

- Oil & Gas
- Construction & Manufacturing
- Pharmaceutical
- Law Enforcement & Military
- Firefighting
- Others

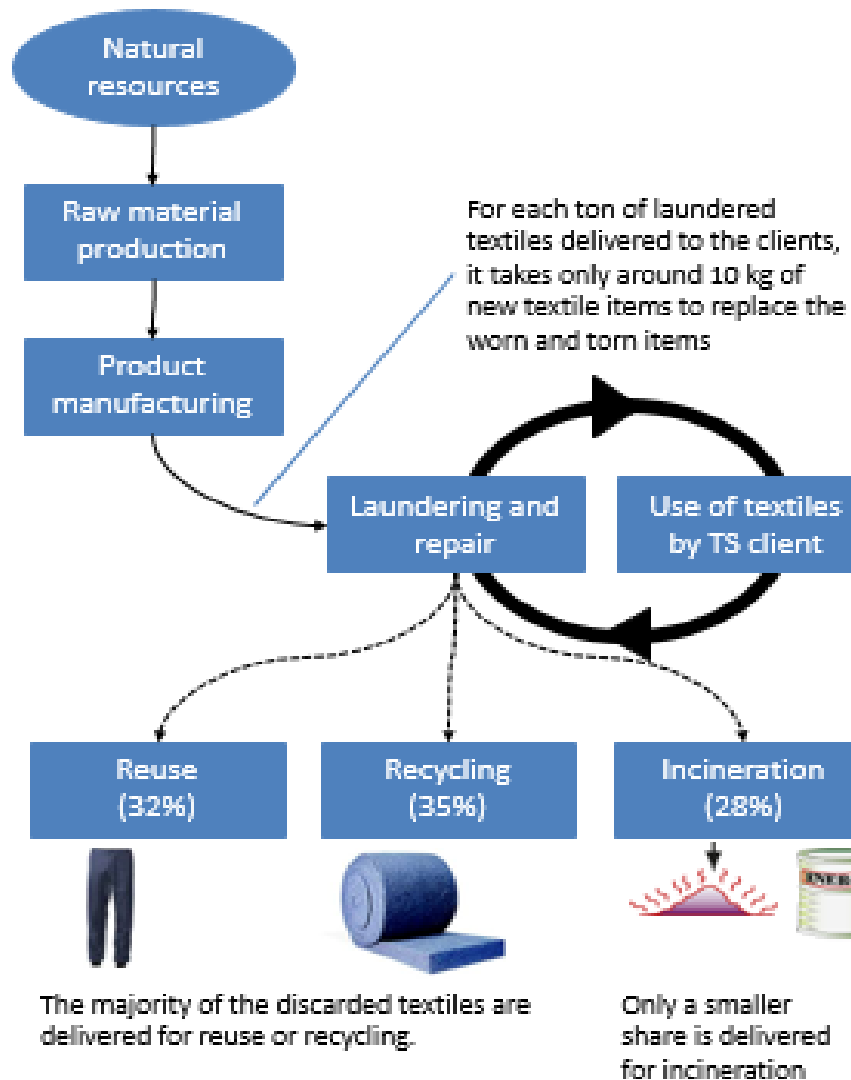
PPE, circular economy and textile service – where is the point?

Advantages of laundering versus buying PPE

- Protective properties are consistently maintained
- Hygiene is paramount
- Stains and soiling removed without risk to wearer
- Garments are repaired, replaced and quality approved
- Colour cross contamination and deterioration is avoided
- Lifetime of garments tracked and retired at end of life



Textile rental services play a key role in providing a safe, risk-free working environment for employees in many sectors.



Flow of textiles through a typical textile service supply

- Product life extension is a fundamental element of the textile services business model:
 - Rented workwear can have an extended lifespan due to a fit-for-reprocessing design.
- At the end-of-life, reuse and recycling already accounts for 67% of the discarded textiles in textile services.

The principles of circularity for PPE

- Reuse
the more washing/reprocessing cycles the less resources are used – long-life cycle as basis of the success of the business – less production, less waste
- Repair
PPE can be repaired but strict certification limits repair – manufacturers of PPE do not repair – textile service does!
- Recycle
New processes of recycling available – textile service companies recycle more textiles than other solution
- Shared economy
PPE is purchased by textile Service SMEs and rented to customers – access over ownership



A circular business model: textile services for PPE

New economic models are increasingly built around rental and leasing solutions. This rapidly growing transition from linear to circular thinking marries cost-effectiveness with sustainability.

WE ARE A CIRCULAR AND SUSTAINABLE ALTERNATIVE TO:

- ownership (of textiles and washing machines)
- washing textiles at home
- disposables (surgical textiles, hand drying systems)

OUR BUSINESS MODEL FOCUSES ON:

- | | | |
|-------------------------------------|-------------|---|
| • Availability | rather than | ownership (of washing machines and of textiles) |
| • Functionality and long life | rather than | use and dispose of |
| • Product and service | rather than | product and service as an afterthought |
| • Product design for long lifetime | rather than | use a few times and dispose of |
| • Integrated repair and maintenance | rather than | dispose and replace |

Source: Lindström

How can European legislation and standardisation support sustainable business models for PPE?



Legislation and Standardisation for reprocessing PPE

The situation

- PPE legislation is mainly product driven and setting requirements for safety and health functions.
- Drafting PPE standards and certification so far focuses on helping to reach conformity with the relevant legislation – 2016/425 – and thus ensure product requirements.
- No requirements or references to reprocessing and life-cycle of products – no effect on circular economy
- Guideline documents refers to reprocessing in 11.6.1.4 in terms of cleaning, maintenance and disinfection, e.g. the laundering and drying conditions and:
 - maximum number of cleaning cycles that can be performed, i.e. after how many cleaning cycles the PPE has been tested
 - operations necessary to apply after cleaning or maintenance, to ensure that the PPE retain the optimum level of effectiveness.
- However, this only referring to information to be given by the manufacturer. No need to aim for longer lifecycles of products.



Standards and legislation can have a major impact on enabling and initiating a sustainable approach to PPE.

The role of standardisation for circular PPE

Lifecycle of a PPE product varies depending on the quality of raw materials and the manufacturing process, therefore:

- More holistic approaches along the production chains are needed by all stakeholders.
- Standardisation can help simplifying along the production process to ensure PPE products are fit for a longer lifecycle.
- Standards for PPE products should not only include product requirements for ensuring their safety and function, but also reprocessing, reuse, and recycling at the end-of life.
- Revising the standards following the new PPE Regulation 2016/425 should include these principles wherever necessary and possible.
- This will help SMEs and the local economy (collecting, processing and re-distributing).



Standardisation bodies should ensure a balanced involvement of all interests and stakeholders in PPE to make sure circular aspects can be added to pure product requirements into new standards.

How can public procurement support sustainable business models for PPE?



Recommendations and Action Plans are rolled out

United Nations SDG 12.7:

„promote public procurement practices that are sustainable in accordance with national policies and priorities“



„Government procurement bodies clearly have significant demand-pull potential within the workwear garment sector. In addition to its direct role as a purchasing client for workwear textiles, Government also has an indirect role through legislation and regulation. In some cases this can lead to challenges around overcoming significant barriers (e.g. fiscal) to encouraging more circular pathways for workwear procurement within public bodies.“



Source: United Nations, Sustainable Development Goals/European Clothing Action Plan

Recommended GPP criteria by the Commission

- Purchase textiles that require less energy for drying and ironing.
- Purchase colour-fast fabrics that do not shrink during use, that are constructed to be more durable in use and which have longer-lasting functional coatings.
- Contract services that minimise the energy used to wash, dry and iron textiles.
- Contract services that maintain textiles in order to extend their lifetime.
- Contract services that reuse maximise the potential for reuse and recycling of textiles at the end of their service life.



Source: European Textiles & Workwear Market: The role of Public Procurement in making textiles circular

Situation for procurement of PPE clothing in the EU

„European commission is an overarching stakeholder through its influence on policy drivers and the provision of guidance, best practice case studies and procurement criteria through Green Public Procurement (GPP).“

Collective action is needed:

- to consider users, collectors, recyclers and remanufacturers of workwear, who are critical at end of first use.
- circularity of workwear textiles is potentially very high for both synthetic and natural fibres
- increasing quality and quantity of supply through more controlled collection, e.g. by including such requirements in public procurement contracts.
- encouraging and incentivising better design for durability, lifetime optimisation and end-of-life
- more resource efficient business models such as servitization, take-back and buy-back

GPP criteria: a major influence on circularity of PPE

- Increasing the functional life of workwear garments is a key opportunity.
- Specifying product care labels of PPE clothing can improve durability through recommended approaches to washing and drying of garments.
- Improving durability is an important element for circular procurement.
- ‘better quality’ may refer to user comfort and aesthetics so that PPE can be worn more frequently and kept for longer.
- repair options are limited outside of service contracts, this reduces the potential lifetime of garments.

„The current EU GPP criteria should add a new criteria area with a focus on textile services.“



Sources:

ECAP (European Clothing Action Plan, 2017): European Textiles & Workwear Market: The role of Public Procurement in making textiles circular
 EU Commission, Joint Research Center, 2017: Revision of the EU Green Public Procurement (GPP) Criteria for Textile Products and Services



Closing the loop – all stakeholders needed. Thank you!

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