

ADDRESSING SCP IN THE FASHION AND APPAREL SECTOR

SCOPING STUDY - EXECUTIVE SUMMARY



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Acknowledgement

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ABBREVIATIONS

BAT	Best Available Technology
EU	European Union
GDP	Gross Domestic Product
GIZ	Gesellschaft für Internationa
GPP	Green Public Procurement
NGO	Non-Governmental Organis
RMG	Ready-Made Garments
SCP	Sustainable Consumption a
SCPF	Sustainable Consumption a
SDG	Sustainable Development G
SME	Small and Medium Sized Er
SPP	Sustainable Public Procure
UN	United Nations

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EXECUTIVE SUMMARY

MARKET ASSESSMENT AND BUSINESS **EVOLUTION**

The textile and clothing chains are composed of a wide number of sub-sectors covering the entire production cycle from the production of raw materials (fibres) to semi-processed (yarn, woven and knitted fabrics with their finishing processes) and final/consumer products (carpets, home textiles, clothing) and industrial use (technical textiles). Similarly, the global leather sector comprises multiple industries starting with the preservation of raw hides and skins, the preparation, tanning and finishing of leather, and the production of a range of leather consumer or industrial products. Resource consumption and environmental concerns are important factors encompassing the whole life cycle including agricultural fibre and raw hide production, the chemical and tanning industry, yarn and fabric manufacturing, product manufacture, the actual usage phase of products, and their end of life. With the large-scale outsourcing of textile and leather manufacturing to countries with cheap labour pools and less evolved environmental regulations mainly in Asia, these aspects and the risks associated with them have been transferred as well. As per the World Trade Organisation Report World Textile and Apparel Trade in 2017, seven out of the top ten exporters of textiles and clothing, and four out of the top ten exporters of leather are located in Asia (Lu 2017). China holds the global leading export role for leather shoes and leather consumer products with more than 35% and 40% respectively. In Bangladesh, Cambodia, Myanmar and Pakistan these sectors have become important sources of revenue and employment. Today's supply chains are closely interlinked, stretching their intricate networks across several countries and continents. In 2018, the world production of all fibres rose to 111 million metric tons, increasing by four million tons against 2017, and by 35 million tons over the past decade. Around 80 billion new garments are produced globally every year. Average consumption has nearly doubled, from 7kg to 13kg per person, in 20 years (Textile Beat 2015; FAO 2013). If the global population rises as expected to 8.5 billion people by 2030 and the GDP per capita grows at 2% per year in the developed world and 4% in the developing world, the overall apparel consumption will rise by 63%, from 62 million tons in 2017 to 102 million tons in 2030 - an equivalent of more than 500 billion T-shirts (Boston Consulting Group 2017).

Consumers' purchase decisions will play a more important role than ever regarding sustainability in the textile and leather sectors. Consumption decision can either support the emerging sustainable fashion/apparel industry or confirm the status quo. This is true for private consumers, business to business transactions and public consumption patterns. Whilst there is a trend for consumers to increasingly pay attention to attributes other than price and design, such as consumer safety, quality, but also overall sustainability aspects, "fast fashion" remains a real phenomenon. Studies show that while the volume of production (in terms of pieces of clothing) has doubled between 2000 and 2015, the clothing utilisation rate (defined as average number of times a garment is worn before it is thrown out) has significantly dropped, with the drops being proportionally higher in emerging fashion markets such as China with a 70% drop over the last 15 years (Euromonitor International 2016). Studies indicate that the "fast fashion" phenomenon have emerged in several Asian Tiger countries (Cheng et al. 2015).

With fast growing middle classes and increasing portions of disposable income, the domestic consumer markets for textile and leather of formerly purely export-oriented manufacturing countries are increasingly moving in the interest of domestic and international brands. China has established itself as a major importer of textile and leather products and is increasingly outsourcing its production. Chinese apparel sector entrepreneurs continue investing in the establishment of own production capacities in countries within and outside the region (for example in Bangladesh, Myanmar, Vietnam, Ethiopia). By 2025 more than half of apparel and footwear sales will originate outside of Europe and North America (Business of Fashion and McKinsey 2018). In the context of the overall Asian apparel sector, the countries in the Central Asian region (Tajikistan, Kazakhstan, Uzbekistan, Kyrgyzstan, Turkmenistan) at present, play the role of sourcing bases for primary inputs into the apparel value chains (such as cotton, silk, wool, skins/hides), though efforts have been launched to re-establish the once thriving apparel industry.

While Europe and North America accounted for 60% in 2011, by 2025 the share of Western markets' share will drop to 45%. The Asian online apparel market alone is projected to reach USD 1.4 trillion by 2020. The demographic and economic developments in the new markets have led to changes in consumer patterns, comparable to those observed in the

traditional consumer markets in Europe and the USA. are extracted to produce clothes that are barely used This has led to the emergence of challenges and and that end up in landfill or incineration shortly after concerns in the region that Western markets have being purchased. The impacts associated with this been facing since the start of mass production of model stand in no relation to the ultimate services cheap clothing, such as how to cope with the growing rendered by clothing. In a business as usual scenario, amount of apparels at their end of life, increased the fashion industry will consume a quarter of the resource use and waste/wastewater generation world's carbon budget by 2050. Apart from being during production. According to estimates by the wasteful on resources, the industry is also polluting. Circular Fibres Initiative, USD 500 billion value is lost With reference to the issue of plastic pollution, every year due to clothing that is barely worn and clothes release half a million tonnes of microfibres rarely recycled (Circular Fibre Initiative 2017). into the ocean every year; this is equivalent to more than 50 billion plastic bottles. At this point, it is not The prevalent, almost linear model of producing, clear whether microfibres can be cleaned up at all, or distributing and using clothing implies the use of a be prevented to enter food chains (Ellen MacArthur growing amount of non-renewable resources which Foundation 2017b).

Figure 1 – Global material flows for clothing in 2015



Includes factory offcuts and overstock liquidation

Plastic microfibres shed through the washing of all textiles released into the ocean

Source: Circular Fibres Initiative analysis

Source: With permission from EllenMacArthur Foundation, A New Textiles Economy: Redesigning fashion's future (Ellen MacArthur Foundation 2017a).

Considering the sector's growth forecasts by the consumed and discharged, land required for growing Global Fashion Agenda and Boston Consulting natural fibres (in turn affecting the use of pesticides Group, the overall water consumption of the sector is and herbicides), as well as demand for petroleumlikely to increase by 50% from 79 billion m3 in 2015 based feedstock for synthetic fibres; all with potential to 118 billion m3 in 2030. Similarly, emissions of CO2 direct and indirect impacts and costs to economies. will rise by 63% from 1,715 million tons to 2,791 But these developments also have a social angle. million tons, while waste generation will escalate The textile/garment sector accounts for about 34% from 92 million tons to 148 million tons, an increase of the total employment in the manufacturing sector of 62%. Down the line, this will also mean an increase across key Asian production countries. In many in the amount of wastewater generated, chemicals Asian nations, however, the sector's minimum wages

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are less than half of what can be considered a living wage. Within the workforce, women make up the majority (e.g. up to 83% of workforce in Bangladesh) raising the issue of equal pay which, according to studies, show considerable scope for improvement. Going by the average number of 5.6 injuries per 100 workers per year in the industry, the number of recorded injuries is projected to reach 1.6 million by 2030 compared to 1.4 million in 2015 according to

the 'Pulse of Fashion Report 2017' by the Danish sustainability platform Global Fashion Agenda and Boston Consulting Group. This number does not take long-term occupational health impacts as result of work environment conditions and exposure to occupational hazards (e.g. chemical, noise, heatstress, ergonomic strains) into consideration (Boston Consulting Group 2017).

Figure 2 – Issues along the textile LCA (adapted from Ellen McArthur F.)



Impact of linear clothing model (textile)

- 98 million tonnes in total of non-renewable resources used per year - including oil to produce synthetic fibres, fertilisers to grow cotton, and chemicals to produce, dye, and finish fibres and textiles
- 93 billion cubic metres of water used for textiles production (including cotton farming)
- 1.2 billion tonnes equivalent of CO₂ greenhouse gas emitted from textiles production (in 2015)
- 20% of industrial water pollution globally attributable to the dyeing and treatment of textiles

Source: A New Textiles Economy: Redesigning fashion's future, (Eller MacArthur Foundation 2017a).

DRIVERS OF CHANGE

Looking at the likelihood of major disruptions in the sector over the next ten years, 40% of respondents in a survey with international experts and practitioners in apparel manufacturing and retailing as well as robotics and sustainability expressed the feeling that sustainability will become a key purchasing factor for mass-market apparel consumers (Andersson et al. 2018). Recycling and reuse are two concepts that are gaining interest (Hemkhaus et al. 2018). In 2016, however, just around 1.5 to 1.6 million tons, i.e. about 10% of textile waste recycled (Recycling magazine 2016). New business models are expected to emerge around service-based fashion, e.g. rental of clothing, in order to increase the usage of clothing items over a lifetime (particularly for items with low

usage). The demand for textile sector products will performance management), and pressure through grow; at the same time, consumers will become more shortening turn-around and delivery times. The way demanding with regards to changes in the product of doing business is also changed by disruptive itself (fashionable, fast, functional, safe), as well as technologies, digitisation and automatization making their production (sustainable, ethical, safe). In its inroads into textile value chains (Business of Fashion 'State of the Fashion Report 2018', McKinsey points and McKinsey 2018). Until not so long ago, it was out that "with information and the ease of comparison deemed impossible that sew-robots would take over at their fingertips due to digitisation and e-commerce, the task from workers in Ready-Made Garment (RMG) factories. With the possibility of such automatization consumers are becoming less brand-loyal. But while they are very price-sensitive, they also base more of of production, manufacturing hubs based on large their purchasing decisions on whether a company's cheap labour pools might become redundant in the practices and mission align with their values" future. Not surprisingly, of late, concepts such as (Business of Fashion and McKinsey 2018). Studies near-shoring (defined as relocating production closer indicate that 66% of global millennials are willing to to the end user markets) has become an issue of spend more on brands that are sustainable (Nielsen discussion but also of concern for those market who 2015). The worldwide alignment of economies towards would lose their competitive edge (Andersson et al. achieving the Sustainable Development Goals 2018). Whilst the near and on-shoring approaches (SDG) by 2030 has already led to a corresponding bear potential opportunities for manufacturers in reorientation of concerned governing structures in Eastern Europe, the Mediterranean, as well as the manufacturing countries covered in the study. nearby Africa (Ethiopia), countries who have built Apart from monitoring the extent and progress of their business model on low-cost labour-intensive meeting the SDGs, policies and programmes have production, look at such developments with concern. been developed and translated into action plans addressing sustainable consumption and production SCP, TOO SLOW IN PRODUCTION AND (SCP) aspects. As of late, also circular economy **CONSUMPTION CYCLES** approaches have been emerging and making inroads into the textile and leather sector. Sustainability The review of documents and interviews conducted evolves to be an integral part of the planning system indicate that the enabling SCP policy framework is at where circular economy principles are embedded different levels of maturity and comprehensiveness throughout the value chain. Till date, specific efforts in the countries covered. Apart from a certain on the ground are limited to a few product lines by commitment towards SCP and the SDGs apparent in well-known international brands, but also initiatives all countries, specific SCP policies are only available in the domestic markets themselves are becoming in a few. Despite the economic importance of these visible (e.g. advancement of green fashion design in sectors in most of the countries, no comprehensive national design schools, launch and advertisement sector-specific SCP policies and/or implementation of products made of recycled textile materials). The frameworks are in place and often lag behind in their European Commission (EU) adopted an ambitious adaptation schedules. This is especially problematic Circular Economy Action Plan in 2015 outlining considering the fast-changing realities. measures that will help stimulate Europe's transition towards a circular economy, e.g. through reinforced Green/Sustainable Public Procurement (GPP/SPP) rules and new obligations to collect waste, including concepts have already been established in some of textiles, separately. In March 2019, the EU adopted a the countries under purview, though to date, textile report which sketches out future challenges shaping or leather products have not yet been explicitly our economy, and paves the way towards a climatereferred to in these documents, as is the case in e.g. neutral, circular economy where pressure on natural the EU Green Public Procurement Criteria for Textile and freshwater resources as well as ecosystems is Products and Services (Dodd and Caldas 2017). minimised (European Commission 2019).

Eco-labels function as a sort of third-party guarantee The type of drivers for change and their origin vary that products and services bearing the label meet from country to country. The apparel industry is going the environmental and social criteria specified in a through a decisive era of major consumer, channel, tender to potential public and private buyers who and supply shifts while suffering from increased can then prioritise these products and services economic volatility. Industry players face rising over those that are not labelled. This is expected to production costs (also due to the increasing demand provide a strong incentive for manufacturers to adopt to internalise costs for social and environmental green practices and deliver sustainable goods of

superior value to consumers. Eco-labelling schemes Conformance to supplier code of conducts set by are actively propagated or proposed in several participating countries. The added-value of having a domestic eco-label will need to be ascertained further in case of textile and leather products. The and leather sectors, particularly in those segments export-oriented segments of the sectors widely refer to international labels and/or certificates to enhance either the marketability of their products or their standing as suppliers to international brands. To this regard, international and domestic brands can use the same labels regardless whether they are catering to the international or domestic markets. As per anecdotal evidence, domestic manufacturers do not legal references). Efforts to strengthen the national vet use eco-labels in domestic markets. Countries such as India, Indonesia and Thailand (the latter not being amongst the countries reviewed) have already developed and published textile and leather related national eco-labelling schemes and use the same labels in international and domestic markets. The desk research indicates that so far only very limited studies have been conducted for the Asian fashion/apparel markets concerning the extent of sustainability performance aspects that are being considered in consumers' fashion/apparel purchase decisions. According to their findings, sustainability aspects only play a low priority role, except for a very small group of fashion/apparel consumer segments. At the same time, there appears to be agreement in the studies that if more information was accessible to consumers, their consideration of sustainability aspects would increase, both with regard to production and consumption.

While the importance of integrating sustainable production practices has been recognised at different national stakeholder levels, this has not yet been adequately reflected in sector-specific policies, regulatory requirements or codes of conduct in the countries covered. Existing environmental regulatory requirements continue to focus on end-of-pipe interventions. With the exception of energy use and carbon dioxide (CO₂) emission reduction, they do not include sector-specific benchmarks or targets aimed at enhancing resource efficiency (e.g. water) or cleaner production methods. Amongst the countries studied, only India has initiated the adoption of Best Available Techniques (BAT) reference frameworks for the two sectors, comparable to those compiled under the European Industrial Emission Directive (European Commission 2018). As part of their own sustainability requirements, international brands have started setting specific benchmark requirements within their supply chains in order to achieve improved ecological footprints (e.g. water, energy, chemicals). All players within the value chains are expected to contribute.

international buyers has been and continues to be a key driver for change and adoption of sustainable production approaches and practices in the textile catering to the export markets. One might argue that initiatives by international brands have even partly taken over the role of enforcement agencies in a few countries. Regulations and their enforcement often remain ineffective due to shortcomings in the respective national enforcement and governance framework (e.g. limited capacities, corruption, missing governance framework and streamline/enhance the national enforcement capacities are underway, often supported by bi-/multilateral development partners. In contrast to environmental standards, social standards, covering working conditions and labour rights, are better anchored with the respective national policy frameworks and corresponding sectoral guidelines in all countries. However, as in the case of environmental performance standards, initiatives of international brands also have been playing a crucial role in advancing these concepts, along with the efforts of the national authorities. The degree of action and sanctions against poorly performing industry players differs between countries and often within countries. While tanneries in the state of Tamil Nadu have to strictly comply with zeroliquid discharge, tanneries in Uttara Pradesh are only now in the process of adequately managing their wastewater. In Bangladesh, many textile units still function without a functional wastewater treatment system though legally required for renewing one's environmental license. According to the China National Textile and Apparel Council the country's enforcement agencies have tightened their grip on environmental issues. Extensive audits and reviews of factories were initiated, which led to the shut-down of nearly 40% of textile manufacturing facilities across China (Yan 2019). However, there is growing concern among observers, that Chinese entrepreneurs might relocate production to nearby manufacturing countries to escape this tight enforcement grip. (Hossain 2019; Beckmann and Lange 2019)

The sustainability performance varies by the type of segment within the value chains and company size. Larger factories and a few sustainability-focused niche players are most advanced, while Small and Medium Enterprises (SME) which together account for more than half of the industry rate lowest. Despite the fact that the textile and leather sectors are commonly categorised as "most polluting industry" in almost all countries covered, only the larger factories

are likely to appear on the radar of enforcement. To facilitate exchanges and collaboration between agencies. Factories at the product manufacturing the various stakeholders and beneficiaries for joint level (e.g. RMG, shoe factories) have been under transformative actions on the transition to SCP in this scrutiny by international initiatives for much critical sector, the following actions are suggested: longer time than their sub-suppliers (dyeing units, tanneries). In addition, the availability, maturity and 1. A first step should be to define and agree upon a common definition of the term "fashion/apparel efficiency of the respective social and environmental governance structures contribute to performance sustainability" and the criteria it encompasses. differences between the countries. While in the past, international buyers paid particular attention to social perceptions and lack of a single common and environmental conformance aspects at the definition of fashion/apparel sector and its scope/ product manufacturing stage (RMG, leather product degrees of sustainability from a SCP perspective. manufacturing) or raw material level (e.g. organic This could then be used to benchmark national cotton) in both value chains, such efforts have started policies and regulations in this regard. to systematically look at and address these in the 2. Whilst there are several progressive policies and whole value chain (Hossain 2019; Paul and Durairaja regulations in place in some of the countries, 2019).

In this context, SMEs require special attention: they constitute an important backbone of the two sectors in all the participating countries where they mainly cater to the domestic market, but also play a minor role as sub-suppliers for the export-oriented industry segments. All countries have special policies in place which support SMEs to ensure their continuous economic contribution. Ensuring adequate social and environmental performance poses a challenge, both in terms of technical and financial capabilities as well as local support structures. Vietnam has implemented a comprehensive system which aims at including SMEs in the fold of sustainable performance improvement. In context of GPP/SPP, special attention is being paid to ensure equal access and participation of SMEs. For example, India has established a public procurement system which specifically reserves a percentage (20%) of textile and leather products to be sourced from SMEs.

SUGGESTED FOLLOW UP APPROACH FOR ADDRESSING SCP IN THE FASHION AND APPAREL SECTOR

It is widely acknowledged that addressing sectoral SCP issues and contributing to a sustainable development will require a multi-stakeholder approach and a new pattern of thinking. To this regard, a considerable number of national and regional SCP related initiatives (including several with sector focus) are already being implemented. Given the differences in settings and requirements in the participating countries, the proposed way forward calls for a differentiated and custom-tailored approach, building on existing initiatives and experiences in the region, and complementing them with experience from outside the region (e.g. Europe).

- Currently, a challenge lies in the variety of
- changes and innovations towards more sustainability in the sector are largely driven by private sector initiatives, labels and compliance specifications. One such example is the LWG label that provides a reference standard for good compliance in the leather industry that functions as a signal for international corporations to engage in business with a supplier or not. It will be important to work on lessons learned from private labels, in terms of performance standards, benchmark figures and so on, that can be drawn for public initiatives that all too often still focus and rely on end-of-pipe solutions. The discussion will help policy makers to define industry goals and their translation into national legislation.
- The development of a criteria catalogue for 3. an eco-label in the region seems necessary drawing lessons from the EU label as well as from countries within the region that already have established sector-specific eco-labelling schemes (e.g. India, Indonesia and maybe Thailand). The scoping study identified a lack of knowledge and transparency regarding the sustainability of products as one major reason for consumers not to prefer sustainably produced products over conventional ones. In order to increase transparency and trust, eco-labels can lead the way, as has been done in the EU with its eco textile label. To this regard, follow up work should consider liaising with GIZ FABRIC, coordinating/ aligning its own regional consultations with those envisaged under the regional FABRIC programme, as well as liaising with Eco-label initiatives in other participating countries such as in Mongolia.
 - a. The process of the development of the criteria catalogue will further serve the ambition to include provisions for textile and leather into

SPP/GPP where such schemes are already established or under establishment. To this regard, the SWITCH-Asia programme should closely liaise with European partners (GPP Joint Research Centre) on the development of GPP for fashion products and services. This needs to go hand-in-hand with the compilation of country-specific analyses to assess the potential (importance) of fashion/ apparel as an additional future product category for consideration in the respective GPP/SPP systems. For this purpose, close working relation should be established with ongoing GPP/SPP initiatives, such as the one under UN Environment.

b. In line with the approach applied by the UN Environment 10YFP Programme on SPP (Working Group 3C: Building Linkages and Synergies between policies for promoting SME in Public Procurement with Policies for improving environmental performance in developing countries), the SWITCH-Asia programme could specifically focus on the preparation of sector-specific guidelines as well as recommendations to ensure equal opportunity for SMEs from the sectors in participating in GPP/SPP as well as eco- 3. Brands and retailers find themselves at labelling schemes.

Correspondingly, three working areas could cover 1) Common Definition, 2) Learning from private initiatives and 3) Eco-Labelling. To ensure a holistic working process and ensure an integrated approach, concerned stakeholders from all sectors should be associated and consulted:

- 1. Policymakers at various levels can give direction for the transition creating the right enabling conditions and incentives. In addition, they can set the right example by fostering the adoption and implementation of GPP/SPP sending out the right signal both to industry and consumers. **Representatives of GPP/SPP nodal agencies** of countries in the region with established (or in process) GPP/SPP initiatives should be specifically involved as key and/or supportive actors. In addition, European counterparts as well as experts or officials from other countries 4. Education and research institutions can who contribute to either the development and/or implementation of sector specific GPP/SPP and eco-labels schemes will be invited as process facilitators.
- 2. Industry (regardless of size) at each stage of the value chain plays a key role to operationalise the

systemic changes in the textiles/leather system. Industry associations can act as a conduit between policy makers and industry, providing support by translating policies and programmes into sector-specific actions plans, and by feeding the industry's perspective into the planning and policy development processes. Apart from that, the associations are well positioned to foster collaboration among players across the value chain. While textile/garment/leather sectors from all countries should be part of the Fashion/Apparel Sustainability process, representatives of sector associations with established sustainability programmes and/or focal points will be preferred. Additionally, individual innovative entrepreneurs with a track record of embracing new sustainable business models should be brought on-board. To ensure the consideration and reflection of the SME perspective, representatives from SME associations will be involved (e.g. Dhaka Chamber of Commerce and Industry DCCI/Bangladesh, BUILD/Bangladesh). This should also include business intermediaries which extend SCP related training and advisory services to SMEs (e.g. National Cleaner Production Center in Vietnam and Sri Lanka).

- the end of the value chain positioned at a crossroad between sustainable consumption and production. This position enables them to reach out to both consumers and down-stream players in production alike. On the one hand, they can influence the formers' purchasing behaviour by changing their value proposition and marketing, and on the other hand, by addressing the latter's challenges in the supply chains thereby inducing change. In several of the manufacturing countries, formal buvers' fora bring international brand representatives together usually representing the large brands. It is suggested involving such selected brand representatives and conveners throughout the consultation process. However, organisations, which are actively involved on advancing sourcing from SMEs should be consulted and associate in priority at regional as well as at national level (e.g. Fair-trade networks, CARE International).
- support the transition by embedding SCP (and circular economy) principles in their teaching, as well as by finding solutions through research and innovations that overcome technical challenges along the value chain. In this context, researchers may be encouraged to extend their academic

research as well as scientific approaches to encompass above issues related to fashion and apparel sustainability (e.g. Asian Institute of Technology, Bangladesh University of Fashion Technology - BUFT, United Nations University Institute for the Advanced Study of Sustainability UNU-IAS, Japan; University of Lahore, Pakistan).

- 5. NGOs, international bodies and development partners ensure that broader environmental and societal considerations are taken into account in future solutions. This would also allow the linking with existing SCP related initiatives in the region. In particular, it is recommended to collaborate with project representatives/experts of UN Environment and GIZ FABRIC who are engaged with the regional GPP/SPP or Green Purchasing Networks (e.g. Green Purchasing Network India/EkonnectKnowledge Foundation, Green Purchasing Network Indonesia).
- 6. Consumer Associations are advocacy groups mobilising to protect consumers from unsafe products, false advertising or pollution caused by corporate practices through forms of protests, litigation, lobbying or campaigning. Consumer associations of the textile and leather sector will bring the view of consumers and represent their expectations towards textile and leather products to ensure adequate transition towards responsible consumption and production in this critical sector.

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